

BHARATI COLLEGE OF EDUCATION



KANDRI MORE MANDER, RANCHI

B. ED

2022 - 2024

Assignment on

EPC-3

CRITICAL UNDERSTANDING OF ICT

EXTERNAL

1. Computer
2. Methods of Computer
3. Satellite

Guided by

Manoj Kumar Gupta Sir

Submitted by

Satish Kumar

Name - Satish Kumar

Class - B.Ed 1st Year

Class roll no. - 91

Exam Roll no. - 22BED00370



Certificate

This is to certify that this project – “EPC – 3” has been performed by Mr Satish Kumar of B. Ed 1st year .

This project has been successfully completed by the candidate under the supervision and guidance of Prof Manoj Kumar Gupta . He has taken proper care and shown almost sincerity in the completion of this project . I certify that this project is upto my expectations and as per the guidelines.

I wish him a bright and successful future ahead .

Guided by

Prof. Manoj Kumar Gupta

Name – Satish Kumar

Class Roll no. – 91

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Session – 2022-2024





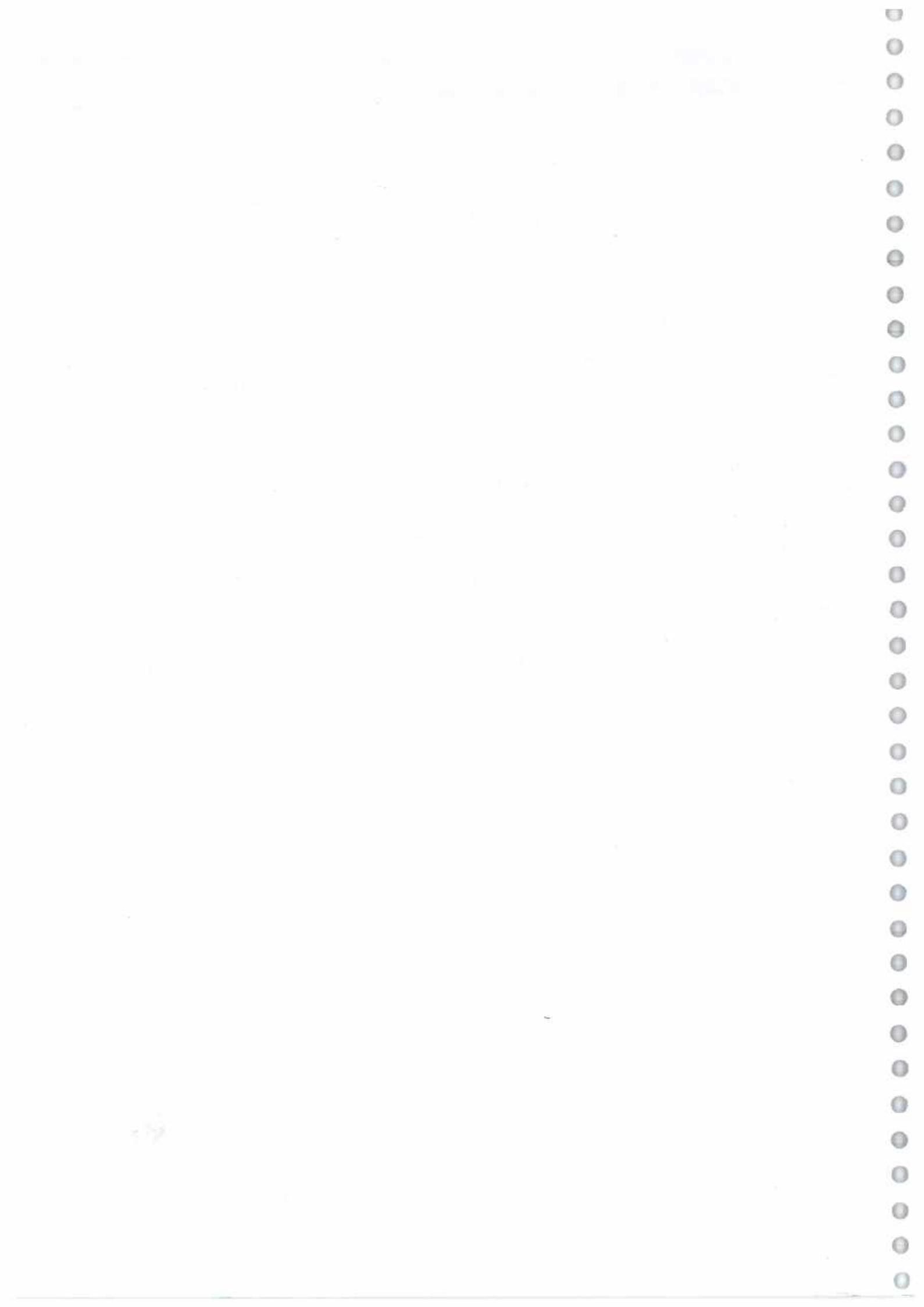
Acknowledgement

I am really grateful for this project opportunity and would sincerely thank my teacher **Prof. Manoj kumar Gupta** for trusting me with this project . Their suggestions and feedback have helped me a lot in improving the quality of the project .

Also , I would like to mention the support system and consideration of my parents who have always been there in my life .

Lastly , I thank all my friends who have motivated me to fulfill the project before the timeline .





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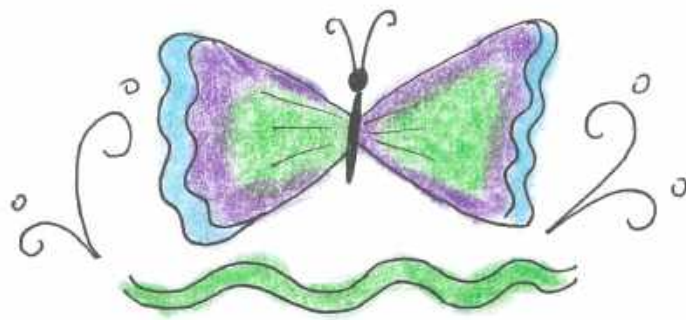
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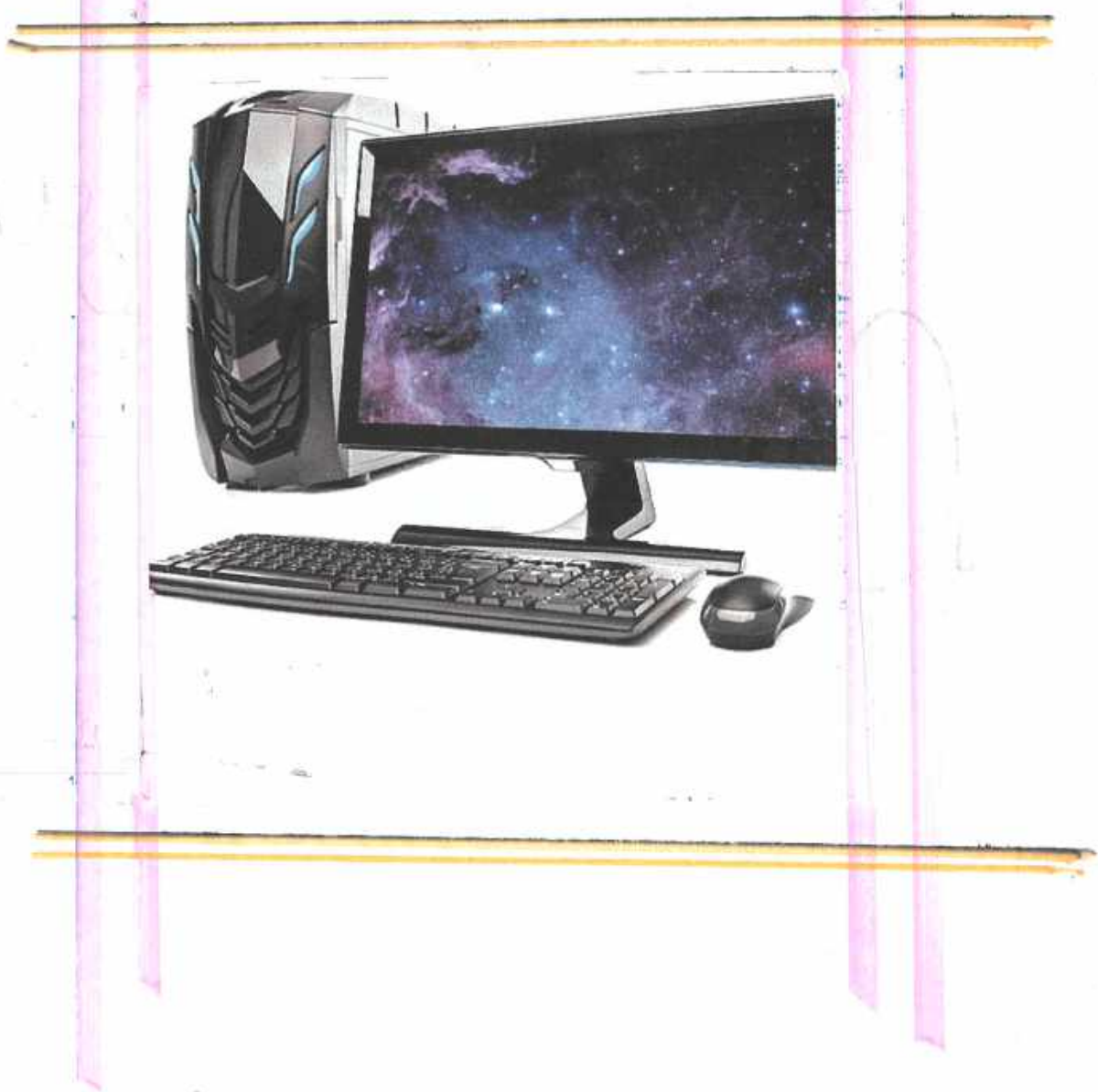
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Computeri





INTRODUCTION OF COMPUTER

• A Computer is a machine that can be programmed to carry out sequence of arithmetic or logical operation automatically. Modern digital electronic computer can perform generic set of operation known as program

These program enable computer to perform a wide range of task. A Computer system is a nominally complete computer that include the hardware operating system and peripheral equipment needed and used for full operation. This term may also refer to a group of computer that are linked and

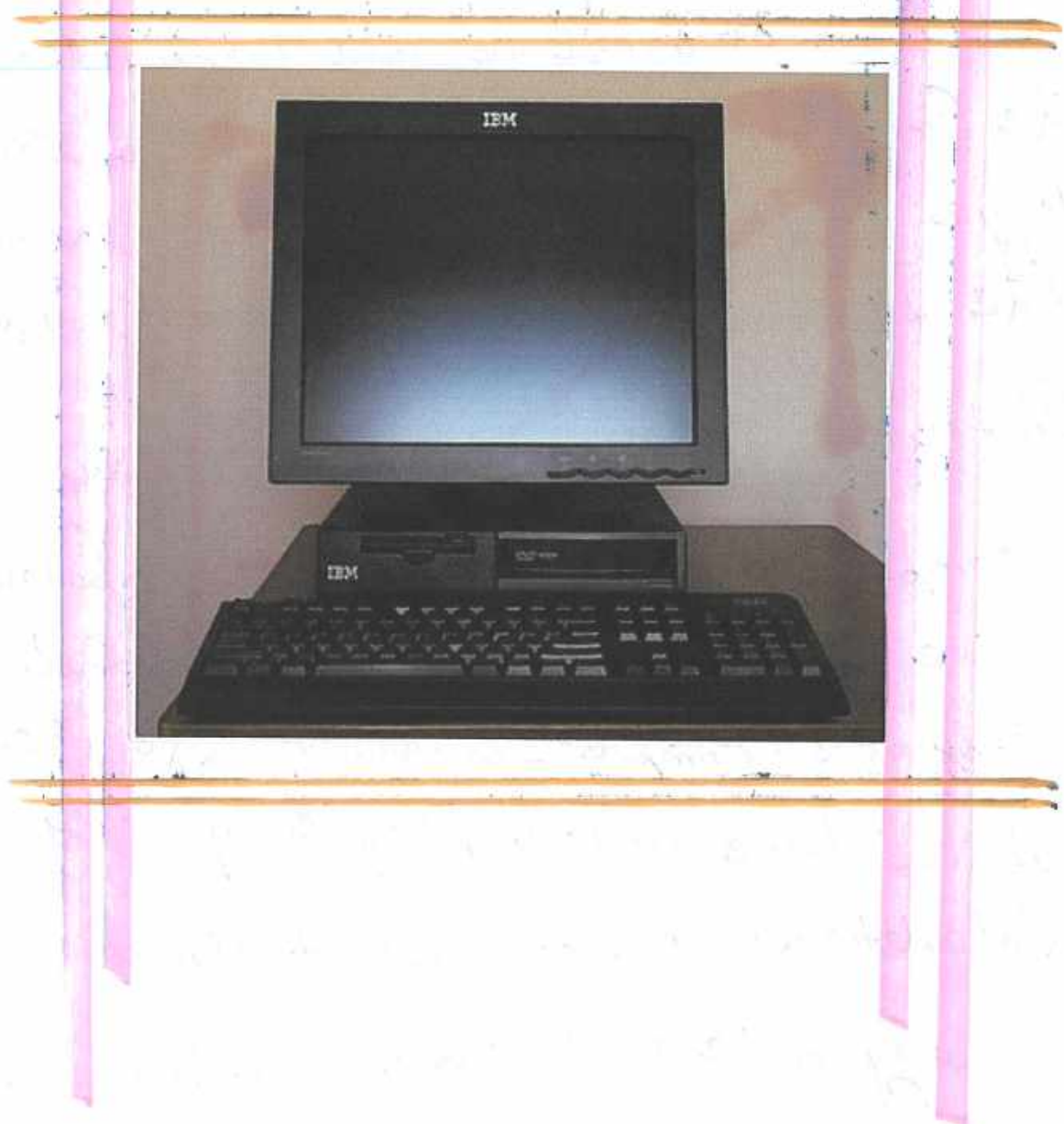
OFFICE OF
COMMISSIONER
OF
CORRECTIONS

❖ A broad range of industrial and consumer product use computers as control systems. Special purpose devices like microwaves ovens and remote controls are included as are factory devices like industrial robots and computer aided design as well as general purpose devices like smartphones. Computer power the

Internet which link billions of other

computers and users. Early computers were meant to be used only for calculations. Simple Internet like the abacus have aided people in doing calculations. Since ancient times.

Early in the industrial and consumer product use computers as control systems. Special purpose devices like microwaves ovens and remote controls are included as are factory.



Definition of Computers:-

∴ The computer is an electronic system that has the ability to manipulate data quickly and accurately as well as designed and organized to automatically receive and store input data, processes it, and produces output under the supervision of a step by step instruction program which is stored in the computer.

By: Sandeev

Computer is an electronic devices which has the ability to do some tele coms like accept input, input processing, storing commands and provide output.

By: Robert Blissner

The computer is an electronic calculating machine that quickly and can receive digital input information then process it in accordance with a program stored in memory generate output information.

Definition of Profit

Profit is the amount of money that a business makes after all its expenses have been paid. It is the difference between the total revenue and the total costs. Profit is the main reason why businesses exist. It is the money that is left over after all the costs of running a business have been paid. Profit is the measure of a business's success. It is the money that is used to pay the owners of the business. Profit is the money that is used to invest in the business. Profit is the money that is used to pay the taxes. Profit is the money that is used to pay the wages. Profit is the money that is used to pay the interest. Profit is the money that is used to pay the dividends. Profit is the money that is used to pay the salaries. Profit is the money that is used to pay the bonuses. Profit is the money that is used to pay the commissions. Profit is the money that is used to pay the royalties. Profit is the money that is used to pay the patents. Profit is the money that is used to pay the trademarks. Profit is the money that is used to pay the copyrights. Profit is the money that is used to pay the licenses. Profit is the money that is used to pay the franchises. Profit is the money that is used to pay the royalties. Profit is the money that is used to pay the patents. Profit is the money that is used to pay the trademarks. Profit is the money that is used to pay the copyrights. Profit is the money that is used to pay the licenses. Profit is the money that is used to pay the franchises.

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History of Computer Studies are

∴ Devices have been used to aid computation for thousands of years. mostly one to one correspondence with fingers. The earliest counting devices was most likely a form of tally stick. Later record keeping and thought out the Fertile Crescent Calcut which represented counts of items, likely livestock or grains, sealed in hollow unbaked clay containers. The abacus was initially used for arithmetic tasks. The Roman abacus was developed from devices used in Babylonia early as 2400 BCE. Since then many other forms of reckoning boards or table have been invented. In medieval European counting house a checkered cloth would be placed on a table and markers moved around



Abstract of Compartmental Models

A compartmental model is a mathematical model that describes the dynamics of a system by dividing it into compartments. The compartments represent different states or stages of the system, and the transitions between them are governed by rates. The most common example is the SIR model for infectious diseases, where S represents Susceptible, I represents Infected, and R represents Recovered. Other examples include models for population dynamics, chemical reactions, and economic systems. The model is typically represented by a set of ordinary differential equations (ODEs) that describe the change in the number of individuals in each compartment over time. The initial conditions and parameters of the model determine the behavior of the system, such as whether it reaches a steady state or exhibits oscillatory behavior. The abstract provides a general overview of the structure and analysis of these models.

around it according to certain rules as an aid to calculating sum of money. The slide rule was invented around 1620-1630

by the English clergyman William Oughtred, shortly after the publication of the concept of the logarithm. It is hand operated along computer for doing multiplication and divisions. As slide rule development progressed, added scales provided reciprocal

square and square roots. Cubes and cube roots as well as transcendental functions


such as logarithms and exponentials, circular and hyperbolic trigonometry and other

functions. Slide rules with special scales are still used for quick performance

of routine calculation. Such as the circular slide rules used for time and distance calculation on light aircraft

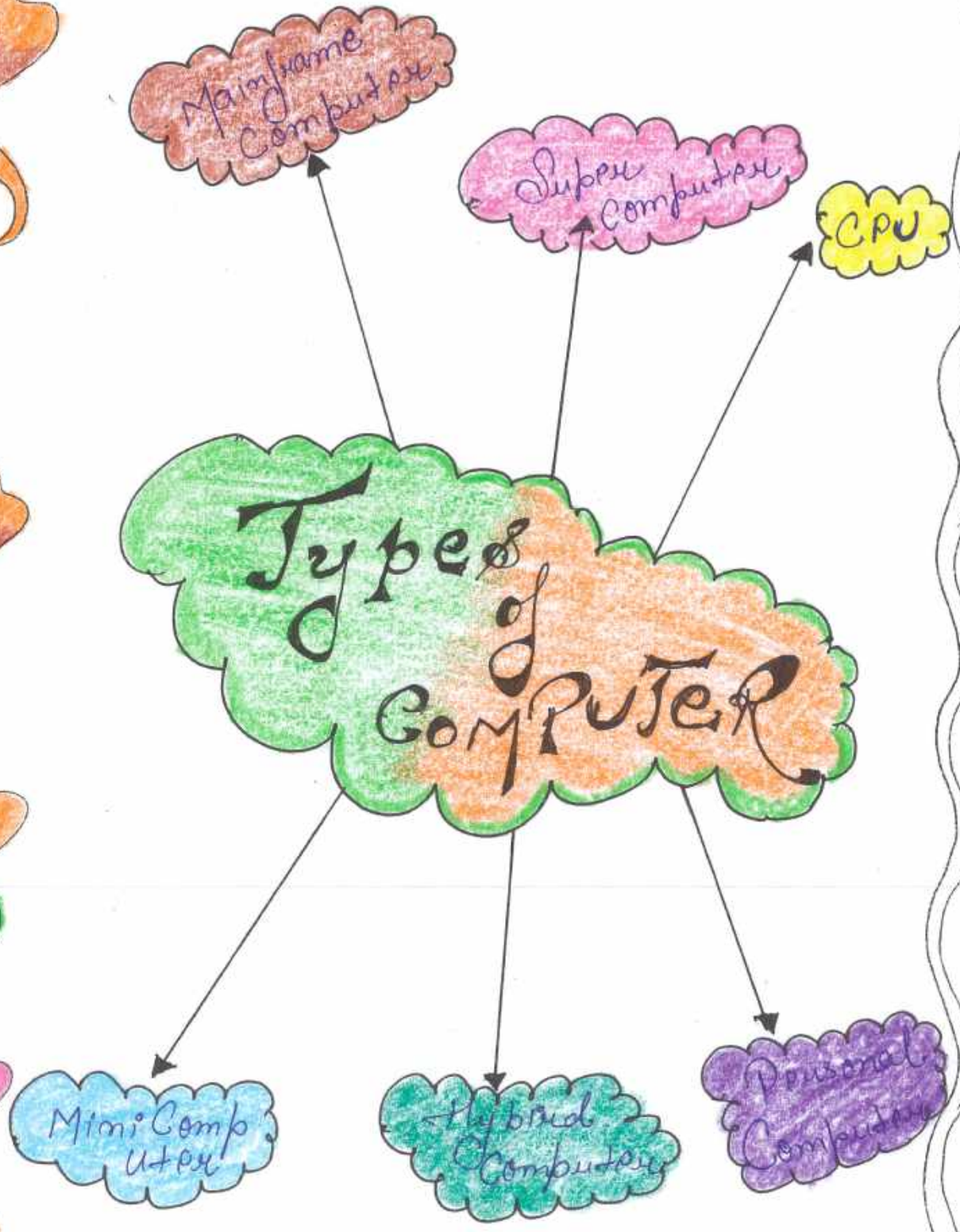
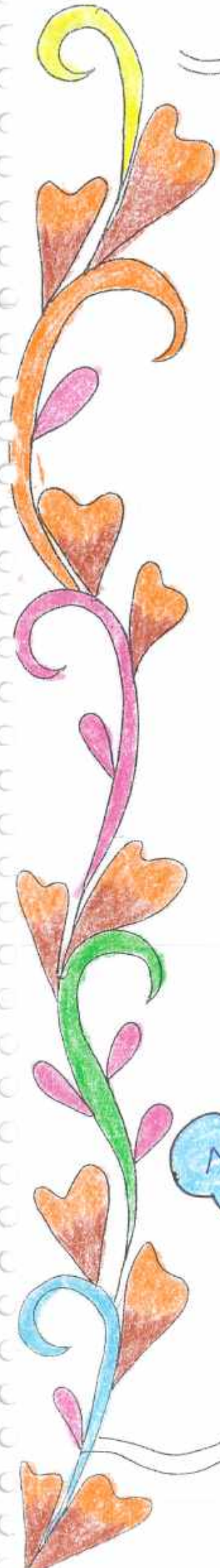
The differential analyzer, mechanical analog computer designed to solve differential

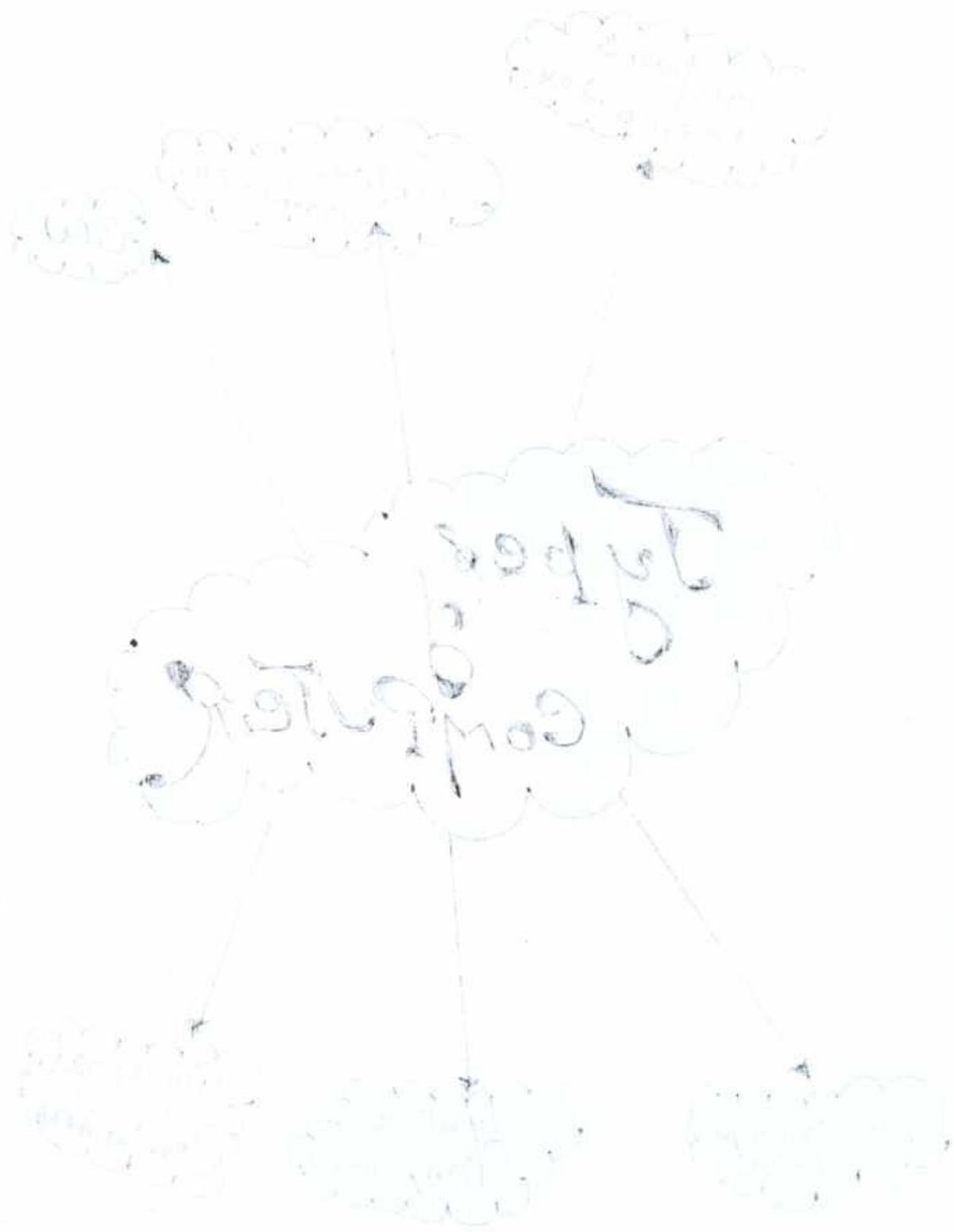




equations by integration, used wheel- and disc mechanisms to perform the integration. In 1876 Sir William Thomson had already discussed the possible construction of such as Calculator but he had been stymied by the limit output tongue of the ball- and disk integrator. In different analyzer the output of one integrator drove the input of the next integrator via graphic output. The tongue amplifier was the advance that allowed these machines to work. In 1890 the Spanish engineer Leonardo Torres Quevedo began to develop a series of advanced analog machines that could solve real and complex root of polynomials. After working on his differential engine he announced his invention in 1922. In a paper to the 1833 he realized much more Graphical Design.

The first part of the report is a summary of the work done in the last year. It covers the progress of the research, the results obtained, and the conclusions drawn. The second part is a detailed description of the experiments carried out, including the methods used, the apparatus employed, and the observations made. The third part is a discussion of the results, where the author compares them with previous work and discusses their significance. The final part is a conclusion, where the author summarizes the main findings and suggests directions for further research.

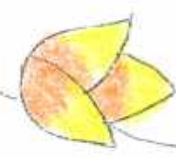
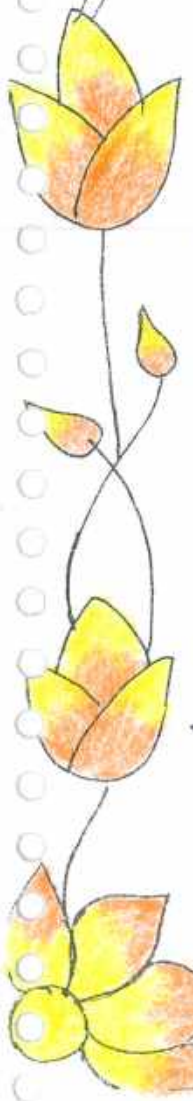




•: Mainframe Computer :- Computer used by large organisation to manage bulk data are are called Mainframe Computer. Mainframe Computer include managing Customer statistics, census and other heavy data single devices for example :-
The system used at Reading Companies.

•: Super Computer :- Computer used at organisation dealing with weather forecasting Quantum Mechanics climate research etc. where high level of performance has to justified are called as Super Computer.

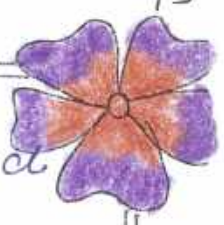
•: CPU :- CPU stands from Central Processing Unit. CPU appeared in the small CPU. RAM and memory chip. It is useful to the word processing, accounting, desktop management.



Introduction
 The world is moving towards digitalization and automation. The use of computers and software is increasing rapidly. This is the reason why we need to learn programming. It helps us to create our own applications and solve various problems. In this project, we will learn the basics of programming using Python.

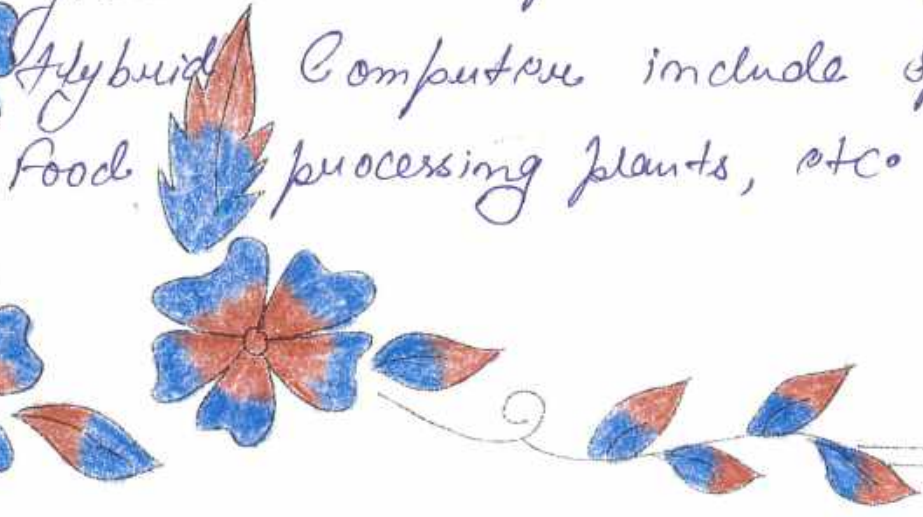


Objectives
 The main objective of this project is to understand the basic concepts of programming. We will learn how to write simple programs and understand the flow of execution. The project aims to provide a solid foundation for further learning in computer science and software development.



∴ Mimi Computers:- Developed in the mid 1960. Mimi Computers are comparatively smaller than mainframe computers. They were developed keeping in classroom. They were developed keeping consideration human interaction, control instrument and were cost-effective for example Smartphone iPad etc.

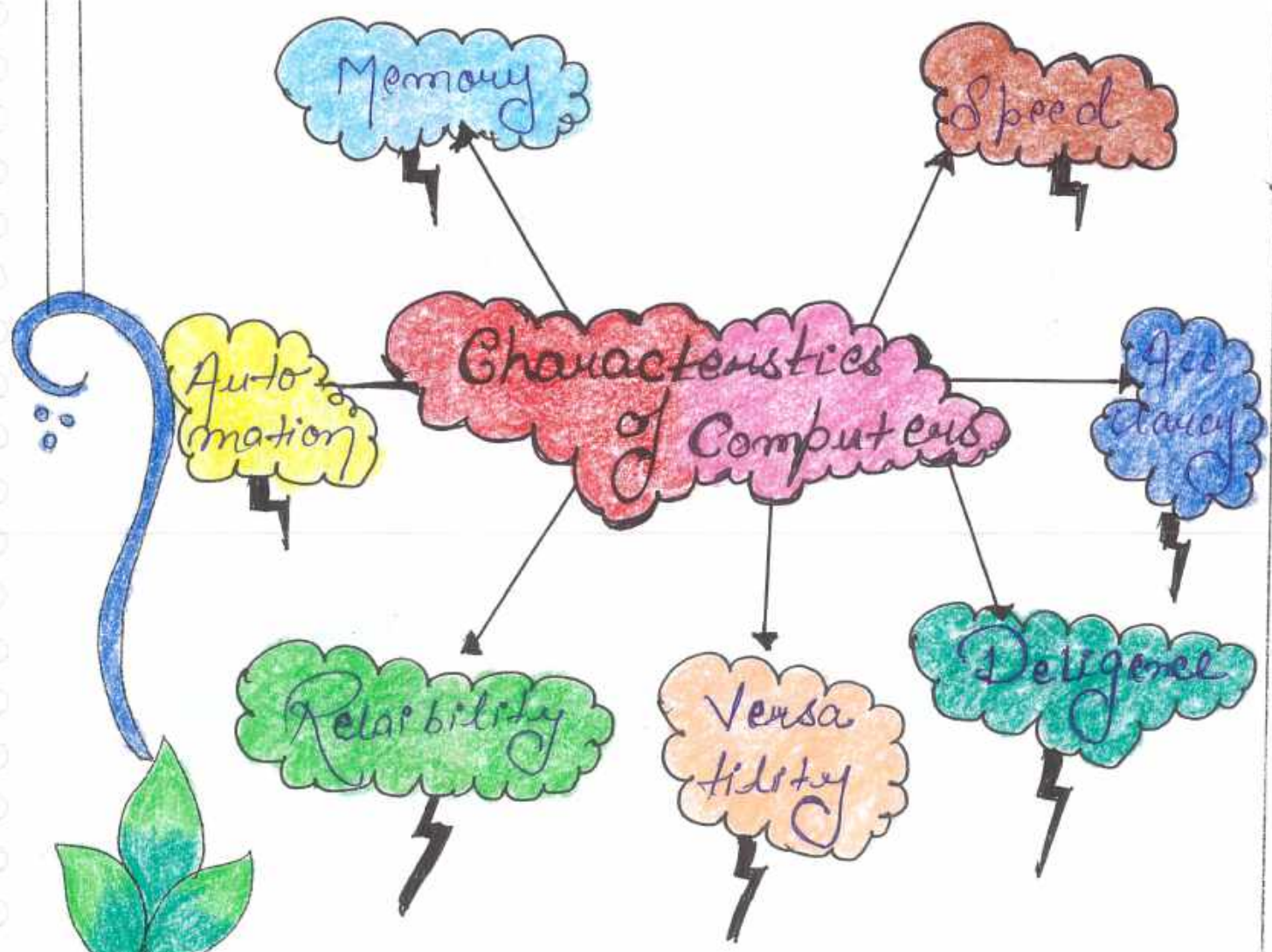
∴ Hybrid Computers:- Computers that exhibit feature of both analog and Digital computers are called Hybrid computers. The logical operations are solved by the digital aspect and the differential equation are solved using the analog features. Few important examples of Hybrid computers include space flight food processing plants, etc.



Mr. D. S. Srinivasan
The Director,
Central Board of Secondary Education,
New Delhi.
Dear Sir,
I have the honor to acknowledge the receipt of your letter of the 15th inst. regarding the matter mentioned in the subject. I am sorry that I cannot give you a more definite answer at this time. The matter is being considered by the relevant authorities and I will be glad to advise you as soon as a final decision has been reached.

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∴ Personal Computer :- A personal Computer has one user who may also be the owner. Although the term has also come also mean any Computer hardware some what like The Original IBM PC,







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[Faint, illegible handwritten text at the bottom of the page]




Speed:- A Computer work with higher speed and accuracy compared to human while performing mathematical calculation. Computer can process millions (1000,000) of instruction per second. The time taken by computer for this operation is micro-seconds and nano seconds.



Accuracy:- Computer perform calculation with 100% accuracy. Error may occur due to data inconsistency or inaccuracy.



Diligence:- A Computer can perform million of task or calculation with the same consistency and accuracy. It doesn't feel any fatigue or lack of concentration. It memory also make it superior to that of human beings.



Advantages of Companies

1. Limited liability
2. Separate legal entity
3. Perpetual existence
4. Easy transfer of shares
5. Tax advantages

Disadvantages of Companies

1. High cost of formation
2. Double taxation
3. Government regulation

Conclusion

Final Thoughts

Companies are essential for economic growth and innovation. While they offer many advantages, they also come with significant costs and regulations. Understanding these factors is crucial for entrepreneurs and investors alike.



∴ Versatility :- Versatility refers to the capabilities of a computer to perform different kinds of work with same accuracy and efficiency.

∴ Reliability :- A computer is reliable as it gives consistent result for similar set data i.e. if we give same set of input any number of times, we will get the same result.

∴ Automation :- Computer has built in memory called primary memory where we store data. Secondary storage are removal devices such as CD's pen.

∴ Memory :- A computer has perform all the task when it store data. Secondary storage are removal devices such as CD's pen drives which are also store data.

1. Variational Calculus - Introduction

The calculus of variations is a branch of mathematical analysis that deals with finding the extrema of functionals.

It is a generalization of the calculus of functions.

2. The Calculus of Variations

The calculus of variations is concerned with finding the extrema of functionals.

It is a generalization of the calculus of functions.

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It is a generalization of the calculus of functions.

3. The Calculus of Variations

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4. The Calculus of Variations

The calculus of variations is concerned with finding the extrema of functionals.

It is a generalization of the calculus of functions.

The calculus of variations is concerned with finding the extrema of functionals.

It is a generalization of the calculus of functions.

Evolution of Computers

Abacus
(3000-0c)

Napier's Bones
(1617)

Pascal's
Adder
(1642)

Liebniz
Wheel
(1665)

Mark I
(1944)

Census
Machine
(1889)

Analytical
Engine
(1833)

Jacquard
Loom
(1804)



Handwritten notes in cloud shapes at the top of the page, including the words "growth", "information", and "network".



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Function of Computers...

Data Processing

Control Unit
Arithmetic Logic Unit

Memory (Temporary)

Storage (Permanent)

Data Input

- Keyboard
- Mouse
- Webcam
- Micro

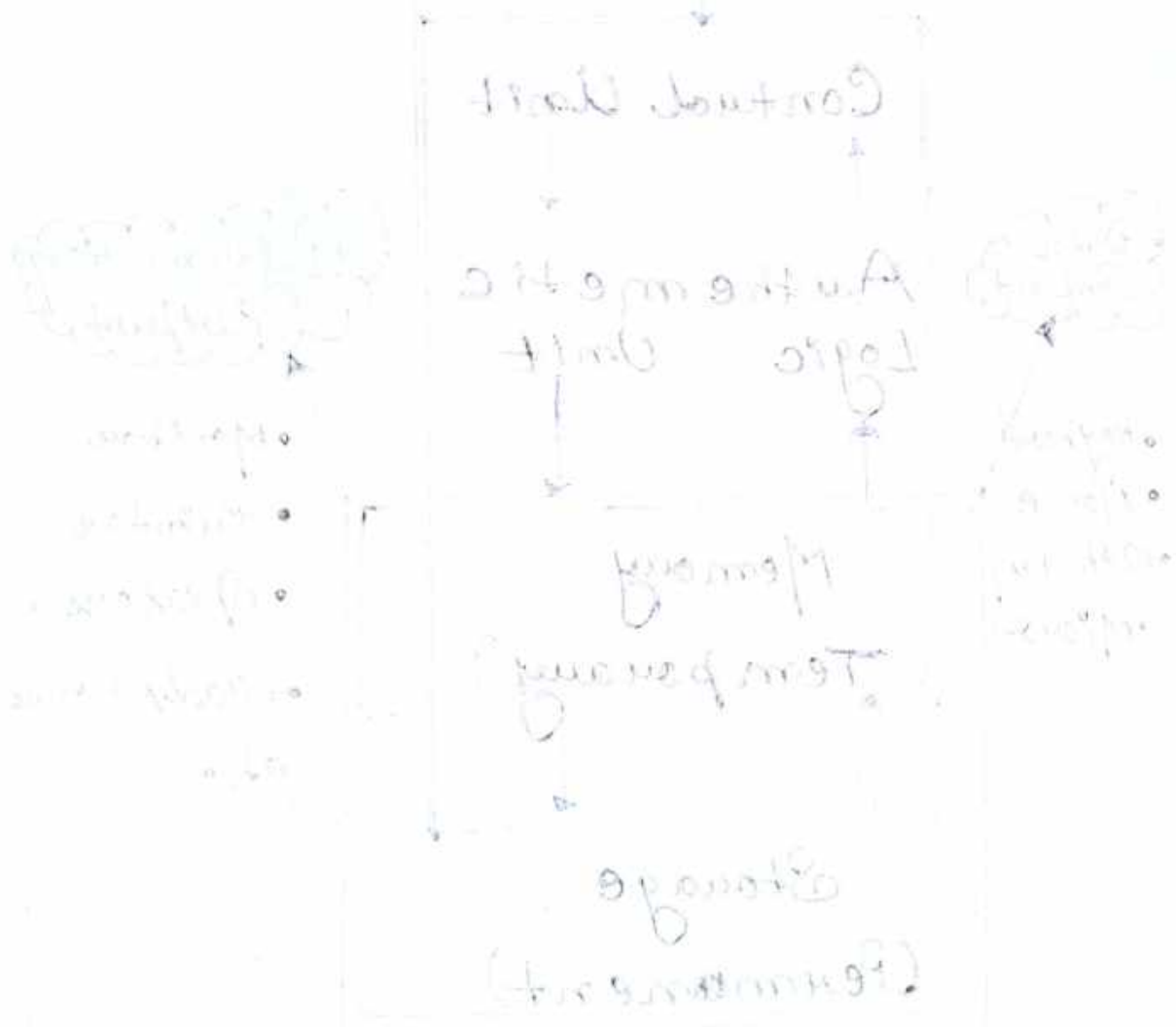
Information Output

- Monitor
- Printer
- Speakers
- Headphones etc



Functions of Computers

Data Processing



CONCLUSION

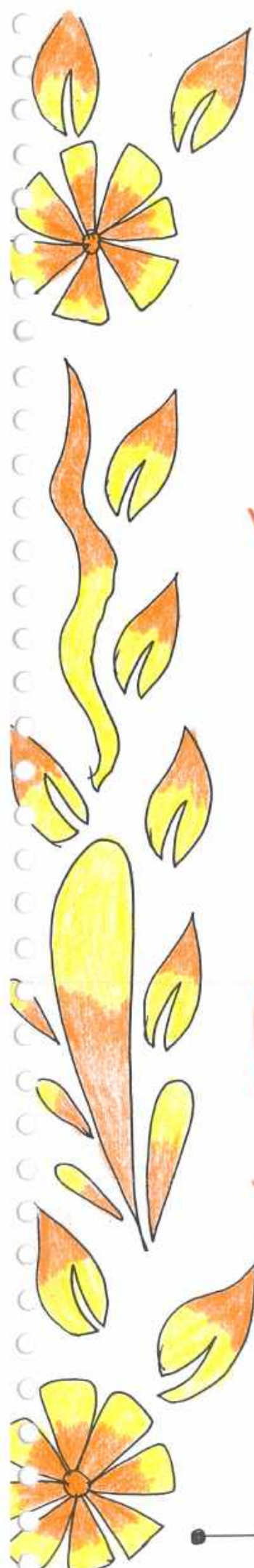
∴ As a result of the various improvement to the development of the Computer we have seen the Computer being used in our areas of life. It is a very useful tool that will continue to experience new development as time passes.

∴ Computers are used in various areas of life education, entertainment sport, advertisement, medicines, science and engineering. Government office and home are some of the application areas of Computers.

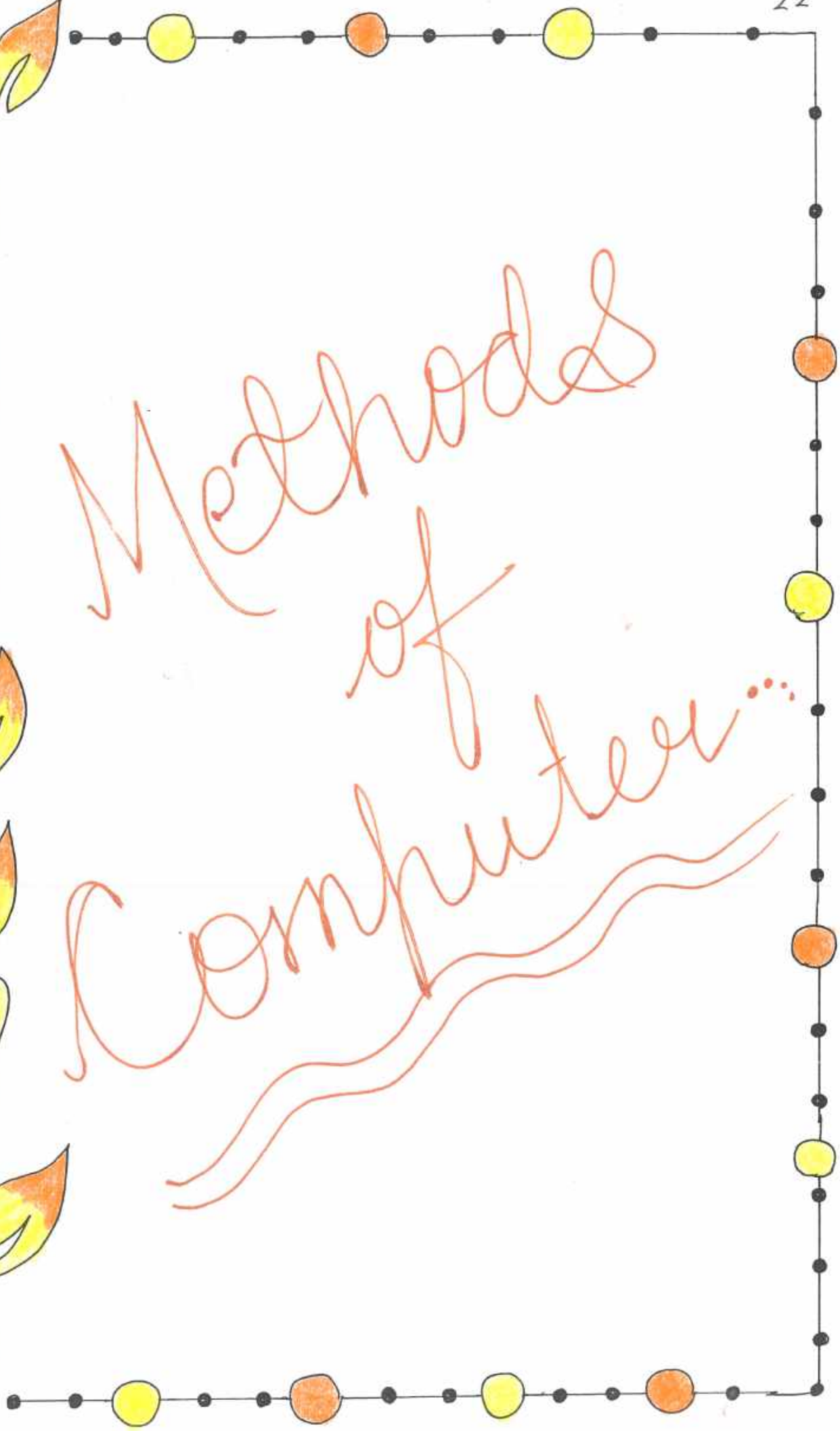
Conclusion

.....

The first part of the paper discusses the importance of the research and the objectives of the study. It highlights the need for a comprehensive understanding of the subject matter and the role of the researcher in this process. The second part of the paper presents the methodology used in the study, including the data collection and analysis techniques. The results of the study are then discussed, showing the findings and their implications. Finally, the paper concludes with a summary of the key points and a call for further research in the field.



Methods
of
Computer...





Phases of Computer Generations ...

❖ First Generation Computers:-
(1940 - 1956)

❖ Second Generation Computers:-
(1956 - 1963)

❖ Third Generation Computers:-
(1964 - 1971)

❖ Fourth Generation Method:-
(1971 - Present)

❖ Fifth Generation Computers:-
(Present and Beyond)

History of Computers
of computer science

Early computers (1940-1950)

Second Generation Computers
(1950-1960)

Third Generation Computers
(1960-1970)

Fourth Generation Computers
(1970-1980)

Fifth Generation Computers
(1980-1990)

Generation of Computer	Time Period	Evolving Hardware
• First Generation	1940s - 1950s	Vacuum Tube based
• Second Generation	1950s - 1960s	Transistor Based
• Third Generation	1960s - 1970s	Integrated Circuit based
• Fourth Generation	1970s - Present	Microprocessor
• Fifth Generation	Present - Future	Artificial Intelligence Based

1. Introduction
 2. Objectives
 3. Methodology
 4. Results
 5. Conclusion
 6. References
 7. Appendix
 8. Index
 9. Summary
 10. Final Remarks

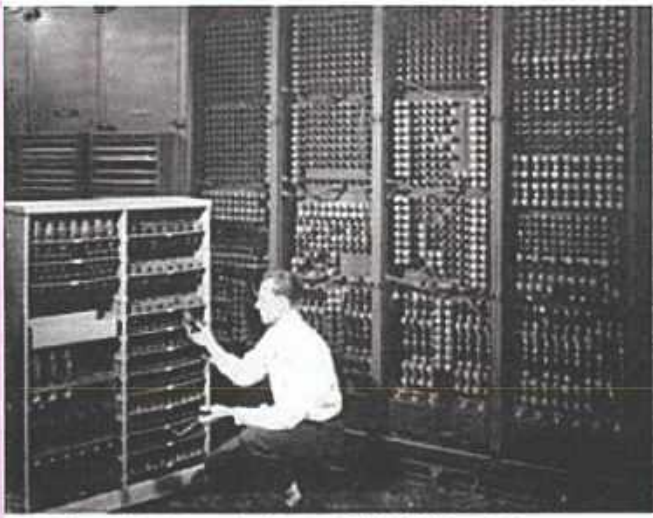
1. Introduction
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 7. Appendix
 8. Index
 9. Summary
 10. Final Remarks

First Generation

••••• Computer :-

- The technology behind the primary Generation Computer was a fragile glass devices which was called a vacuum tube. These computer were very heavy and large. These weren't very available and programming on them was a tedious task as they used low-level programming language and used no OS. First-Generation Computer used for calculation, storage and control. The period of first generation was from 1946-1959. The computer of first generation used vacuum tubes as they basic component for memory and circuitry for CPU (Central processing unit). These tubes like electric bulb, produced a lot of heat and the installation used fire frequently.

First Computer
- Computer :-



Replacing a bad tube meant checking among ENIAC's 19,000 possibilities.

Therefore they were very expensive and only large organizations were able to afford it. In this Generation, mainly batch processing operating system was used. Punch Cards, paper tape, and magnetic tape was used as input and output devices.

∴ The Main features of the first Generation are:-

- Vacuum tube technology.
- Unreliable.
- Supported machine language only.
- Very Costly.
- Generated a lot of heat.
- Slow input and output devices.
- Need of AC
- Non-Portable

Some Computers of this Generation are:-

- ENIAC • EDVAC • UNIVAC • IBM-701
- IBM-650.



∴ Some Examples of First-Generation Computers are:-

∴ ENIAC :- Electronic Numerical Integrator and Computer built by J.T. Peapack Eckert and V. Mauchly was a General Purpose Computer. It had been cumbersome, and large and contained 18000 vacuum tubes.

∴ EDVAC :- Electronic Discrete Variable Automatic Computer was designed by Von-Neuman. It could store data also and instruction and thus speed was enhanced.

∴ UNIVAC :- Universal Automatic Computer was developed in 1952 by Eckert and Mauchly.



Some Examples of First-Order Computable ones:

1. \mathbb{N} - The set of natural numbers is a first-order computable set. The operations of addition and multiplication are first-order computable. The set of first-order computable numbers is denoted by \mathcal{C} .

2. \mathbb{R} - The set of real numbers is a first-order computable set. The operations of addition, subtraction, multiplication, and division are first-order computable. The set of first-order computable real numbers is denoted by \mathcal{C} .

3. \mathbb{C} - The set of complex numbers is a first-order computable set. The operations of addition, subtraction, multiplication, and division are first-order computable. The set of first-order computable complex numbers is denoted by \mathcal{C} .

Second Generation Computer

∴ Second Generation Computer used the technology of transistors rather than bulky vacuum tube. Another feature was the core storage. A transistor may be a device composed of a semiconductor material that amplifies a signal or opens or closes a circuit.

Transistors were invented by Bell Labs. The uses of transistors made it possible to perform powerfully and with due speed. It reduced the dimensions and price was generated by vacuum tubes. Central Processing Unit, memory, programming language and input and output units also came into the scene second generation.

Second Generation
Composites

④④④

as a result of the
 state of the
 world that
 the
 character may be a
 as a
 composite or
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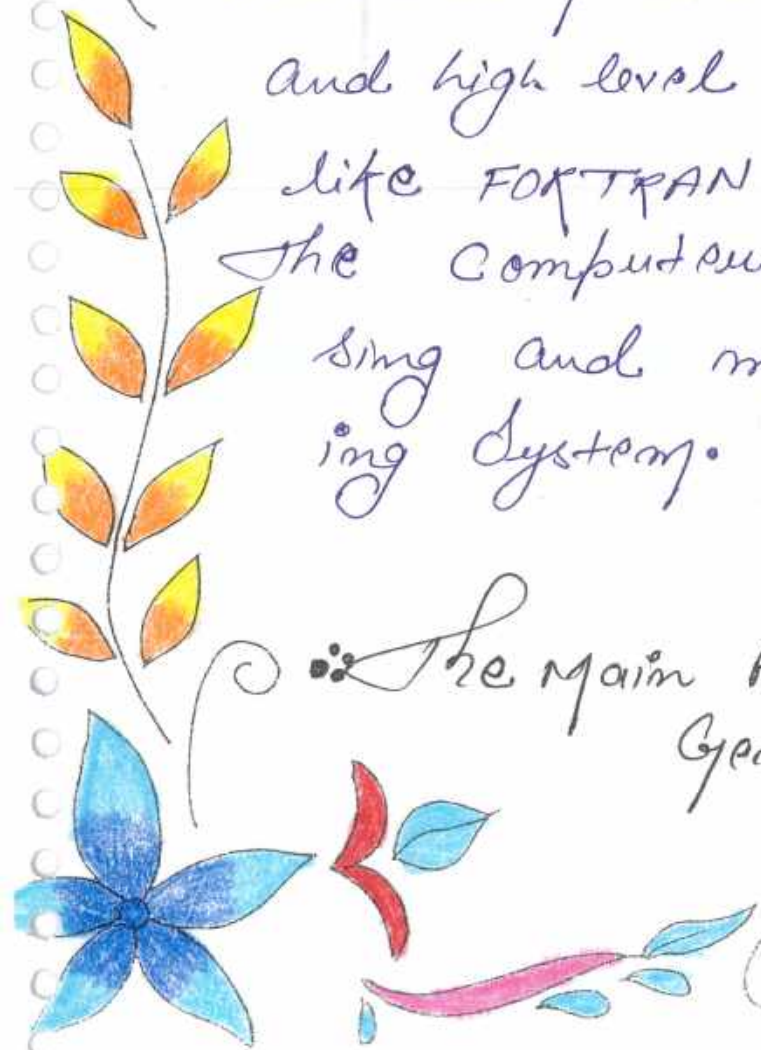
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21

The period of Second Generation was from 1959-1965. In this Generation, transistors were used that were cheaper, consumed less power, more compact in size, more reliable and faster than the first Generation machines made up of vacuum tubes. In this Generation, magnetic cores were used as the primary memory and magnetic tape and magnetic disks as secondary storage devices.

- In this Generation assembly language and high level language programming like FORTRAN, COBOL were used. The computer used batch processing and multiprogramming operating system.

• The main features of Second Generation are :-





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- Use of transistors
- Reliable in comparison to first generation computers.
- Smaller size as compared to first generation computers.
- Generated less heat as compared to first generation computers.
- Consumed less electricity as compared to first generation computers.
- Faster than first generation computers.
- Still very costly.
- AC required.
- Supported machine and assembly language.
 - IBM 1620
 - IBM 7094
 - CDC 1604
 - CDC 3600
 - UNIVAC 1108

1. The first step is to identify the problem.

2. Next, we need to gather information about the problem.

3. Then, we should analyze the information and identify the causes.

4. After that, we can develop a plan to solve the problem.

5. Finally, we should implement the plan and evaluate the results.

6. The last step is to reflect on the process and learn from the experience.

7. This process can be applied to various situations.

8. It is important to be patient and persistent.

9. We should also seek help from others if needed.

10. In conclusion, problem-solving is a skill that can be learned and improved.

THIRD - GENERATION COMPUTER :-

During the third Generation, technology envisaged a shift from huge transistor to integrated circuits also referred to as IC. Here a variety of transistor were placed on silicon chips called semiconductor. The most feature was speed and reliability. IC was made from silicon and also called as silicon chips. A single IC has many transistors, registers and capacitors built on one thin slice of silicon. The volume size was reduced and memory space and dealing efficiency were increased during this generation. The period of third generation was from 1965-1971. The computers of third generation used integrated circuits (ICs).



THIRD - GENERATION
COMPUTERS

2000

The first three generations of computers were based on vacuum tubes, transistors, and integrated circuits. The third generation of computers, which began in the late 1960s and continued through the 1970s, was characterized by the use of integrated circuits (ICs) and microprocessors. These computers were significantly smaller, faster, and more reliable than their predecessors. They also introduced the concept of time-sharing, which allowed multiple users to access the computer system simultaneously. The third generation of computers was a major step forward in the evolution of computing technology.

in place of transistors resistors and capacitors along with associated circuitry. The IC was invented by Jack Kilby. The development made computers smaller in size reliable and efficient. In this generation remote processing, time-sharing, multi programming operating system were used. High level language (FORTRAN - II to IV, COBOL, PASCAL PL/I, BASIC, ALGOL - 68 etc) were used during this generation.

• This main feature of this generation are:-

- IC used
- More reliable in comparison to previous two generations
- Smaller size
- Generated less heat.
- Faster.



- Lesser Maintenance.
- Costly.
- AC Required.
- Consumed Lesser Electricity.
- Supported high level language.

Some Computers of this Genera tion are:-

- IBM 360 Series
- Honey well - 6000 Series
- PDP (Personal Data Processor)
- IBM - 370/168
- IDC - 316

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∴ Fourth Generation Computer...


• In 1971 first microprocessor were used the large-scale of Integration SSI circuits built on one chip called microprocessor. The advantage of this technique is that one microprocessor can contain all the circuits required to perform arithmetic, logic and control function on one chip.

The computer using microchip were called micro-computer. This generation provided even smaller size of computer with larger capacities. These is not enough then very large scale Integrated (VLSI) circuit replaced LSI circuit. The Intel 4004 chip develop in 1971.

Future Generation Computer Science




The future of computer science is bright and full of possibilities. As technology continues to advance, we will see new and exciting applications of computer science in every aspect of our lives. From artificial intelligence to quantum computing, the future is full of potential.



Located all the Component of PC. from the Central processing unit and memory to input output Control. The period of fourth Generation was from 1971-1980.

Computer of fourth Generation used very large scale Integrated VLSI Circuits having about 5000 Transistor and other circuit on a single chip made it possible to have micro-computer of fourth Generation.



Fourth Generation Computer become more Powerful, Compact, reliable and affordable. As a result it gave rises to Personal Computer, time sharing, real time network, distributed operating system were used. All the high level languages like C, C++ DBASE etc were used in this Generation.

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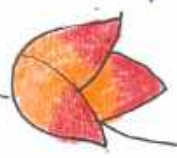
∴ The main features of Fourth Generation are:-

- VLSI technology used.
- Very cheap.
- Portable and reliable.
- Use of PCs.
- Very small size.
- Pipeline processing.
- No AC required.
- Concept of microcomputer was introduced.
- Great development in the field of networks.

• Computers become easily available.

Some Computers of this Generation were:-

- DEC 10
- STAR 1000
- PDP 11
- CRAY-1 (Super Computer)
- Cray-X-MP (Super Computer)



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❖ Fifth Generation Computers:-

The technology behind the fifth Generation of Computers. It always comp-
utes to behave like Human. It
is often seen in program like
voice recognition area of medicines
and entertainment within the
field of Games playing also it is
showing very good performance
where Computers are capable of
beating human competitors.

The speed as the highest size is the
smallest and area of use has remark-
ably increased. within the fifth
Generation Computers. Though not a
hundred percent AI has achieved
to date but keeping the sight to
that this dream also will become

Fifth Generation Computer

The technology behind fifth generation computers is based on the use of logic programming. This is a form of programming that is more like natural language than traditional programming. It is based on the idea of representing knowledge in a way that is easy for a computer to understand and use. This is done by using a language that is based on the idea of sets and relations. The most famous example of this is Prolog, which is a logic programming language. Other examples include Lisp and Scheme, which are also based on logic programming. The fifth generation computer is a computer that is designed to be able to understand and use natural language. This is done by using a language that is based on the idea of sets and relations. The most famous example of this is Prolog, which is a logic programming language. Other examples include Lisp and Scheme, which are also based on logic programming. The fifth generation computer is a computer that is designed to be able to understand and use natural language. This is done by using a language that is based on the idea of sets and relations. The most famous example of this is Prolog, which is a logic programming language. Other examples include Lisp and Scheme, which are also based on logic programming.

a reality soon.

• The Period of fifth Generation VLSI technology become VLSI (Ultra large Scale Integration) technology, resulting

in the production of microprocessor chips having ten million electronic

This Generation is based on parallel Processing hardware and AI (Artificial Intelligence) software. AI is an emerging branch in Computer Science which

improve the means and method of making computers think like human

beings. All high level language like C and C++ Java Net etc. are

used - Generation.

Some Computer of this Generation

are:-

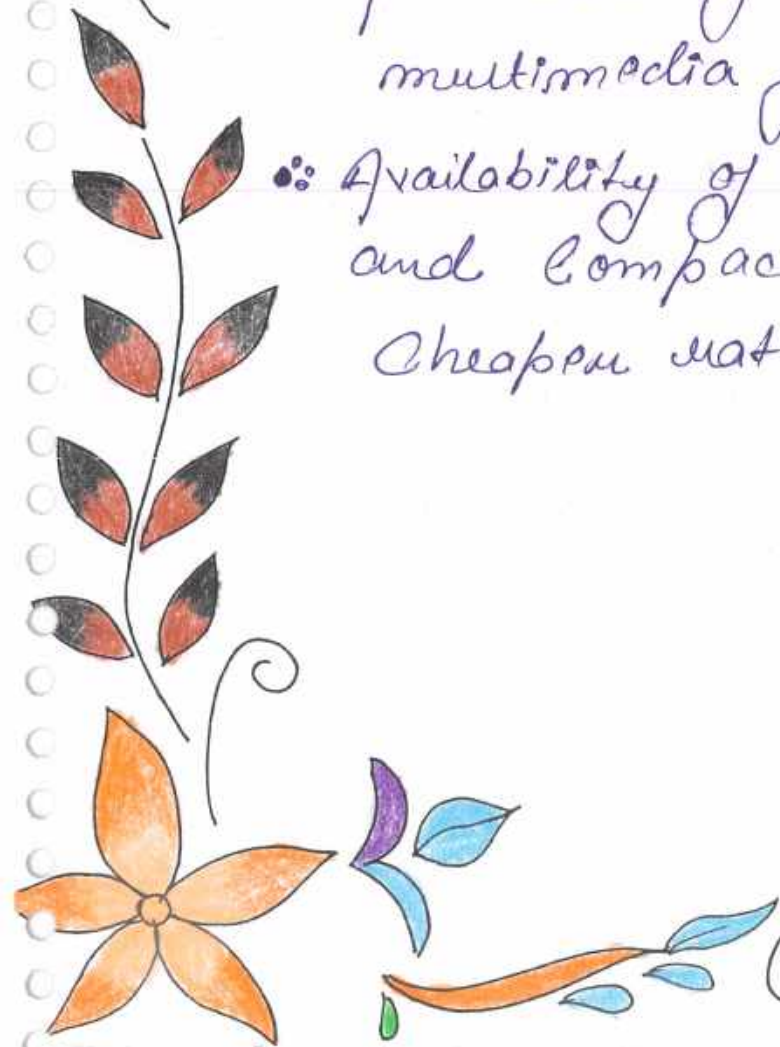
- (a) Desktop
- (b) Laptop
- (c) Note book
- (d) Ultra Book
- (e) Chrome book



46.

The main features of 5th Generation:-

- VLSI Technology.
- Development of true artificial Intelligence.
- Development of Natural language Processing.
- Advancement in Parallel processing
- Advancement in Super Conductor Technology.
- More User-friendly interfaces with multimedia features.
- Availability of every powerful and compact computer at cheaper rates.



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CONCLUSIONS

• The first Generation was developed from 1940-1956 followed by the second Generation from 1956-1963 the third Generation from 1964-1971 the fourth Generation from 1971 until the present and the fifth Generation are still being developed.

The computer made in the fifth Generation used VLSI technology Advancement in Super Conductor technology at parallel processing Development a large with artificial Intelligence.

CONCLUSIONS

The first part of the report is devoted to a study of the general properties of the system. It is shown that the system is stable and that the response is bounded for bounded inputs. The second part of the report is devoted to a study of the transient response of the system. It is shown that the system exhibits a characteristic time constant and that the response decays exponentially towards the steady state value.

The third part of the report is devoted to a study of the frequency response of the system. It is shown that the system exhibits a resonance peak at a certain frequency and that the response decays towards the steady state value at high frequencies. The fourth part of the report is devoted to a study of the effect of parameter variations on the system response. It is shown that the system is sensitive to variations in the gain and time constant parameters.



Satellite



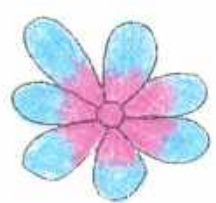
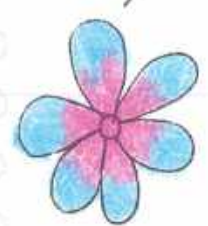


INTRODUCTION OF SATELLITE

• Satellite Communication is a system of transporting from one place to another using a communication. Satellites orbit around the Earth.

A Communication Satellites is an artificial Satellites that transmits the signal via a transponder by sending the receiver at different locations

Telephone, Radio, Television or internet and military application use Satellites Communication.



Introduction OF GALENA

The first mineral to be discovered in the
state of Pennsylvania was galena
in 1761 at the site of the
first mine in the state.

Galena is a lead sulfide mineral
with the chemical formula PbS .
It is one of the most important
minerals in the world.

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These are different ways to Communicate and the propagation and Sky wave Propagation are the two ways Communication takes place for a certain distance. The Maximum distance covered by them is 1500 km, which was over come by Satellites Communication

The Satellites Communication are similar to the space mirror that help us bounce signals such as Radio, Internet Data and Television from one side of earth to another place.

Most of the Satellite Communication are in geostationary orbit 22300 miles (35,900 km) above the equator, so that the Satellites appear stationary at same point in the sky.



There are different types of committees
The most important one is the
standing committee which is
permanent and deals with
the business of the House
of Representatives. It is
responsible for the
administration of the
House and for the
conduct of its business.

The House of Representatives
is divided into several
committees. The most
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∴ Purpose of Satellites

Communication:-

∴ The purpose of Communication Satellites is to relay the signal around the curve of the Earth allowing communication between widely separated geographical points.

∴ Communication Satellites use a wide range of radio and microwave frequencies. To avoid signal interferences, International organisations have regulations for which frequency ranges or 'bands' certain organisations are allowed to use.

This allocation of bands minimize the risk of signal interference.

Satellites are specially made for mobile application such as communication to ships, vehicles

Planes, handsets etc.

Propose of State letter

Government of India



Propose of State letter

Government of India

Propose of State letter

History of Satellites Communication:-

❖ In October 1945 Arthur C. Clarke published an article titled "Extra-terrestrial Relays" in the British Magazine Wireless World. The article described the fundamental behind the deployment of artificial Satellites in Geostationary orbit for the purpose of relaying radio signals.

Arthur C. Clarke is quoted as being the inventor of the concept of Communication Satellites and the term Clarke Belt is employed as a description of the orbit.

The first artificial Earth Satellites was Sputnik 1 which was equipped with an onboard radio-transmitter that worked on two frequencies of 20.005 MHz and

Classification of States

The classification of states is based on the following criteria:

- 1. Political Structure: States can be classified into unitary and federal systems.
- 2. Form of Government: States can be classified into democracy and autocracy.
- 3. Size and Population: States can be classified into large and small states.
- 4. Geographical Location: States can be classified into landlocked and coastal states.
- 5. Development Level: States can be classified into developed and developing states.

and 40.002 MHz on 7 and 15 metres wave length.

The satellite was not placed in orbit for the purpose of sending data from one point on Earth to another, the radio transmission was meant to study the properties of radio transmission was meant to study the properties of radio wave distribution through out atmosphere.

The launch of Sputnik I was a major step in the exploration of space and rocket development and mark the beginning of the space age.

101 km/h at 1000 m
altitude

The first part of the study was
conducted for the purpose of
determining the effect of
altitude on the rate of
respiration of man. The
study was conducted at
altitudes of 1000, 2000, 3000,
4000, 5000, 6000, 7000, 8000,
9000, 10000, 11000, 12000,
13000, 14000, 15000, 16000,
17000, 18000, 19000, 20000
meters.

The results of the study
showed that the rate of
respiration of man
increased with altitude
and that the rate of
respiration of man
was highest at 10000
meters.

∴ How Satellites Communication

Work:-

• Satellites Communication similar to mirror that bounce signals such as radio, internet data and television from one side of earth to another. The stages are involved which explained the working of Satellites Communication.

∴ The Satellites Communication

Work:-

⇒ The are three stages in which Satellites Communication process in work and those are:-

- ★ UPLINK
- ★ TRANSDONDER
- ★ DOWN LINK

Section 210 of the Companies Act 2013

Provision:

... the provisions that require the directors to be members of the company in order to be eligible for one of the offices mentioned in the Act and the provisions that require the directors to be members of the company in order to be eligible for one of the offices mentioned in the Act.

Section 210 of the Companies Act 2013

Provision:

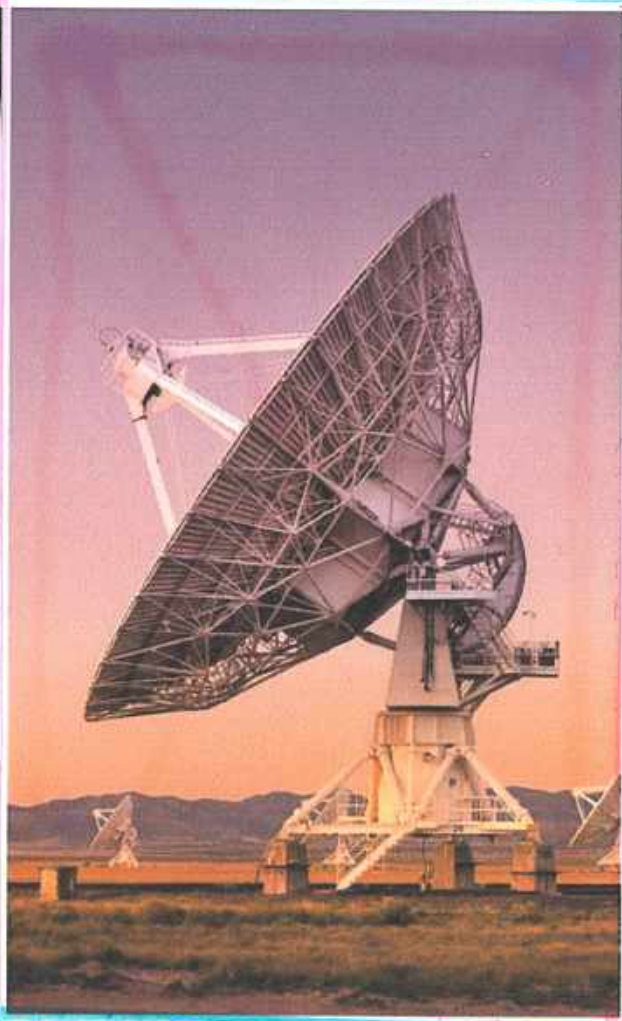
... the provisions that require the directors to be members of the company in order to be eligible for one of the offices mentioned in the Act and the provisions that require the directors to be members of the company in order to be eligible for one of the offices mentioned in the Act.

A ULTIMATE
A TRANSFORMER
A DOWNLINK

UPLINK :- 1st Consis der an ~~ex~~ examples of signal from a television In the the first stage. The signal from the television board cast on other side of the earth is first beamed up to satellites from the ground station on the earth. The process known as Uplink.

•• Transponder :- The second stage involves transponder such as radio receiver, amplifier and transmitter. The transponder boost the incoming signal and change its frequency so that the outgoing signal can be not attuned.

•• Downlink :- The final stage involves a downlink in which the data is sent to the another end of the receiver on the earth.



Types of Satellite ... Communication

∴ The Satellites Communication can be classified into three types which includes the following

(a) Fixed Satellites :-

The system aids in the data transmission across the world through a permanent point on the surface of the Earth. Fixed Satellite Services (FSS) mean the use of specific radio frequencies by satellites to deliver communication fixed on the Earth.

(b) Mobile Satellites :-

The system used in connecting aircraft, ships at remote areas. Mobile Satellite Services between mobile satellite station and one

Types of Gatelets

Gatelets are small, self-contained programs that run on a host machine. They are used to access data from a remote database or to perform a specific task on a remote machine. Gatelets are typically used in conjunction with a database or a web service.

There are several types of gatelets, including:

- Database Gatelets: These gatelets are used to access data from a remote database. They typically use a database driver to connect to the database and retrieve data.
- Web Service Gatelets: These gatelets are used to access data from a remote web service. They typically use a web service client to connect to the service and retrieve data.
- File Gatelets: These gatelets are used to access data from a remote file system. They typically use a file transfer protocol to connect to the file system and retrieve data.

Gatelets are often used in conjunction with a data visualization tool, such as Tableau or Power BI. This allows users to access data from a remote source and visualize it in a dashboard or report.

or more space station or between space station used by this services by means of one or more space station.

•: Research Satellites :-

⇒ Research Satellites or Scientific carrier Instrument to obtain data on magnetic field, space radiation earth and its atmosphere the sun or other star planet or any scientific research.

Depending upon their measurement objectives, research satellites primarily fly in one of the orbits of near polar sun synchronous orbit to allow their sensor to observe the entire globe at same solar time each day or a mid inclination.

CONCLUSION

∴ Satellites Communication System has become an essential part of the world's telecommunication infrastructure, serving billion of people with Internet telephone.

∴ Satellites service have shifted away from telephone to radio and data delivery with television broadcasting and Internet services with latest application.

∴ There are some advantages of Satellites Communication that it is flexible and easy to put in circuit and user control the system.

Sudhansu
External Sign

