

Name: Garima

Date: / /
Page:

CA-101

FUNDAMENTALS OF I

& PROGRAMMING

ASSIGNMENT-1

Ques 1 What are the four fundamental parts of computer? Explain it with the help of diagram.

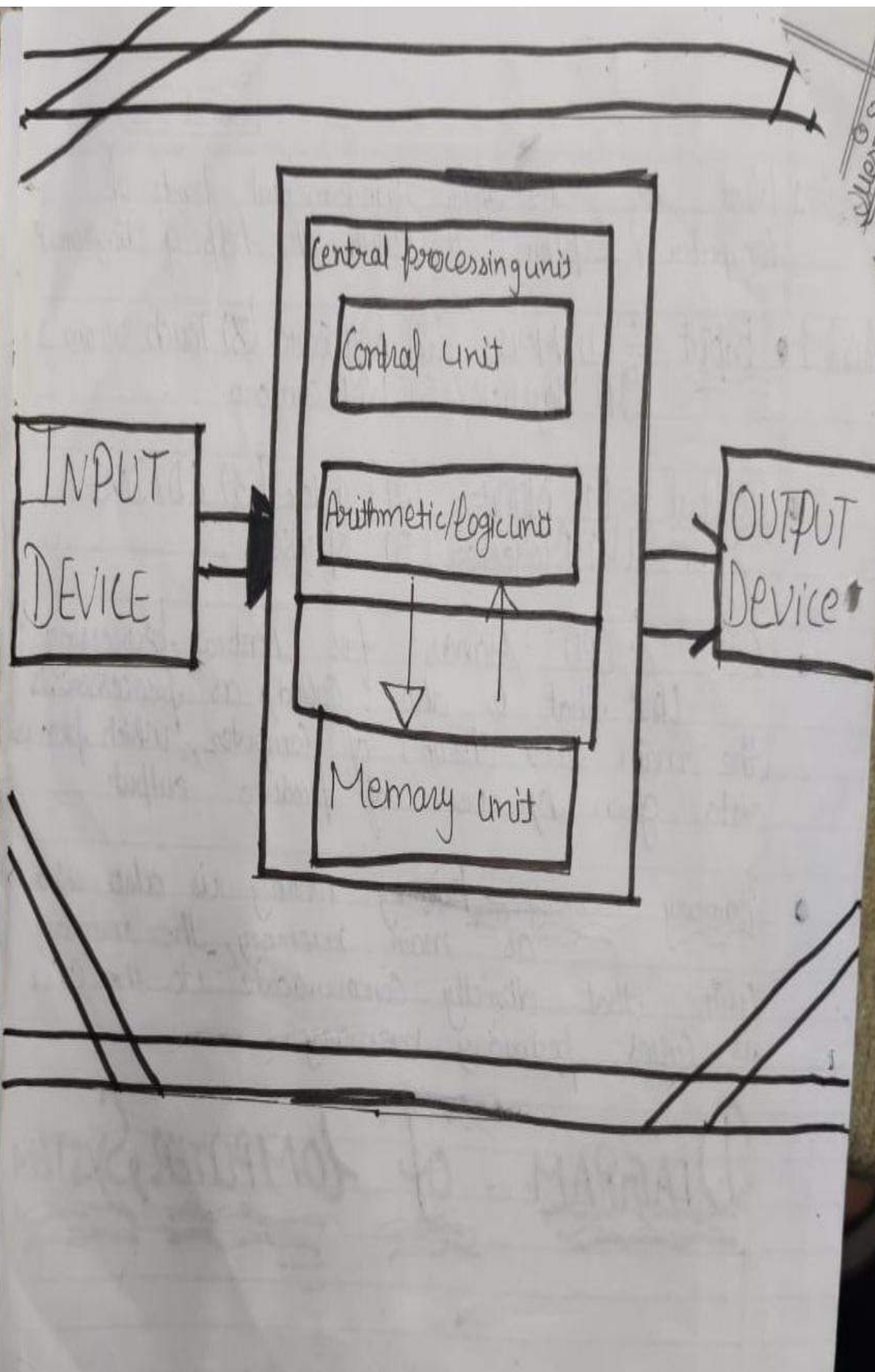
Ans 1 • Input $\Rightarrow$ (1) Mouse (2) Keyboard (3) Touch Screen
(4) Joystick (5) Web camera.

• Output $\Rightarrow$ (1) Monitor (2) Printer (3) CD/DVD
(4) Projector (5) Speakers.

• CPU $\Rightarrow$ CPU stands for Central processing Unit that is also called, as processor. It is the main part (brain) of computer, which processes data given by user and produces output.

• Primary memory $\Rightarrow$ Primary memory is also known as main memory, the memory unit that directly communicates to the CPU is called primary memory.

DIAGRAM of COMPUTER SYSTEM



Type of Micro Computer

DESCRIPTION

Personal Computers / PCs

- Personal Computers are commonly used in homes.
- These are single user computers as only one user can work at a given time.
- PCs are not very expensive.
- Example: Apple II

Workstation

- Workstations are more powerful have more memory and high-speed processor.
- They are also single user computers.
- Workstations are widely used in businesses that require complex computations.
- The most common operating system for workstations are UNIX and Windows NT.

(b) Minicomputer ⇒ Minicomputer is a multiuser computer where several users can work simultaneously. They are smaller in size than mainframe computers but bigger than microcomputers. Example: PDP-11

(c) Main frame ⇒ Mainframe are multi-user, multi-processor systems where more than one user can work on a system.

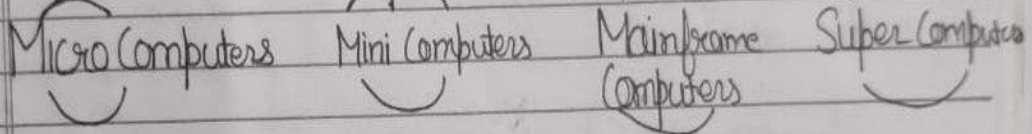
(d) Super Computers ⇒ Supercomputer are extremely fast and powerful computer that can perform and handle billions of instructions in a second. These are very expensive and are used for specific application such as in scientific research, weather forecasting and seismic analysis or various other application that require complex mathematical calculation with 100% accuracy. Example: Cray-1, Cray-2.

Handheld Computers PDAs, Palm-tops / Pocket Computers	- Handheld Computers can be held in hand and are easily portable. - Example: Smart Phone, Palmtop
<u>Portable Computers</u>	- A portable computer is a personal computer which can be easily moved and relocated. - Example: ⇒ laptops.

Q.9 Discuss about the classification of computers based on size and capacity?

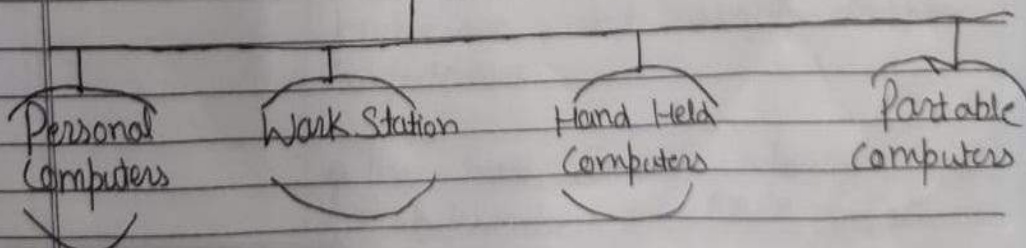
Ans.9

TYPES Of Digital Computers



(A) Micro Computers :- Micro Computers are relatively small in size and are single-microprocessor single user system which are designed to perform basic operations.

TYPES of Micro Computers



Language	Machine language	Assembly language	High level language	PASCAL ADA	Natural
Characteristics	Huge, expensive non-portable, and Unreliable. Input was given through punched cards; output was displayed on punched cards.	Small, cheap, faster, more reliable and portable which also uses punched cards for both input and output.	Consumed less power, fast and more reliable.	More reliable of cheapest solving resource sharing, better which recognize image and graphs.	
USES	Scientific purpose	Commercial Database production Management System	Database Management System	Distrib-uted System	Artificial Intelligence

CHARACTERISTICS OF COMPUTERS

- Speed $\Rightarrow$ Billions of simple arithmetic operations can be performed in a second.
- Accuracy $\Rightarrow$ Every calculation is performed with almost complete accuracy.
- Diligence $\Rightarrow$ Computer is free from tiredness and can work for hours without creating an error.
- Automatic $\Rightarrow$ Job can be performed without human intervention.
- Storage Capacity $\Rightarrow$ It can store huge amount of data photos and videos.
- Versatility $\Rightarrow$ It can perform multiple tasks at same time.
- Plug and Play $\Rightarrow$ It can automatically configure new hardware and software components.
- Reliability $\Rightarrow$ Computers never make mistakes of their own accord.

NON - VOLATILE

- **ROM** $\Rightarrow$ Read Only Memory and also known as non-volatile memory as it stores information permanently. In this unlike RAM information can only read and data stored in it can't be removed or modified. It is mainly used in booting process and when power is turned off an initial program to start computer is saved in ROM.

TYPES OF ROM:

- **PROM** $\Rightarrow$ Stands for programmable read only memory or one-time programmable ROM. OTP because in this only one program can be done at one time by manufacturing it and after that changes can't be done in it. This is less costly and faster type of ROM.

- **EPROM** Stands for **Erasable PROM** in which data can be erased multiple times by exposing it to ultraviolet rays and it will erase the entire data present on the chip. The only drawback is that when user removes or rewrite data again and again on chip then it becomes useless and selective data can't be retrieve from it.

Research, sending email, designing graphics
running businesses and even playing games
etc.

3 OPEN SOURCE SOFTWARE AND PROPRIETARY

Open source software is software which is freely downloadable from the internet. The source code can be modified and redistributed to other user. The software can be used without paying a license fee and anyone can modify the software to add more capabilities. Examples: Mozilla, Firefox, Linux, OpenOffice.org etc. Proprietary software is licensed software and no body has a right to modify it or redistribute it. The proprietary software retains the source code. The owner of the software is the only person who has a right to make modification to the software as well as to add or remove features from the software. Examples Apple iOS, Windows, McAfee etc.

Ques: 5 Distinguish among system software, application software and open source software on the basis of their features.

Ans: 1) SYSTEM SOFTWARE → Computer

is a machine and to accomplish any task it requires some instructions. These set of instructions are known as program. The system software is a collection of programs which controls the internal functioning of computer (reading data from input device, displaying results on screen, shutting down the system, managing files internally etc.) and extends the processing capabilities of the computer. These software are generally written in low level languages which interact with the hardware at a very basic level.

2) APPLICATION SOFTWARE → Application

software are also known as applications which are meant for end users. For example, software for preparing school result, library management system, accounting bills and so on. Application software, are end user programs because they enable the user to create documents, spread sheets, databases and publications, doing online.

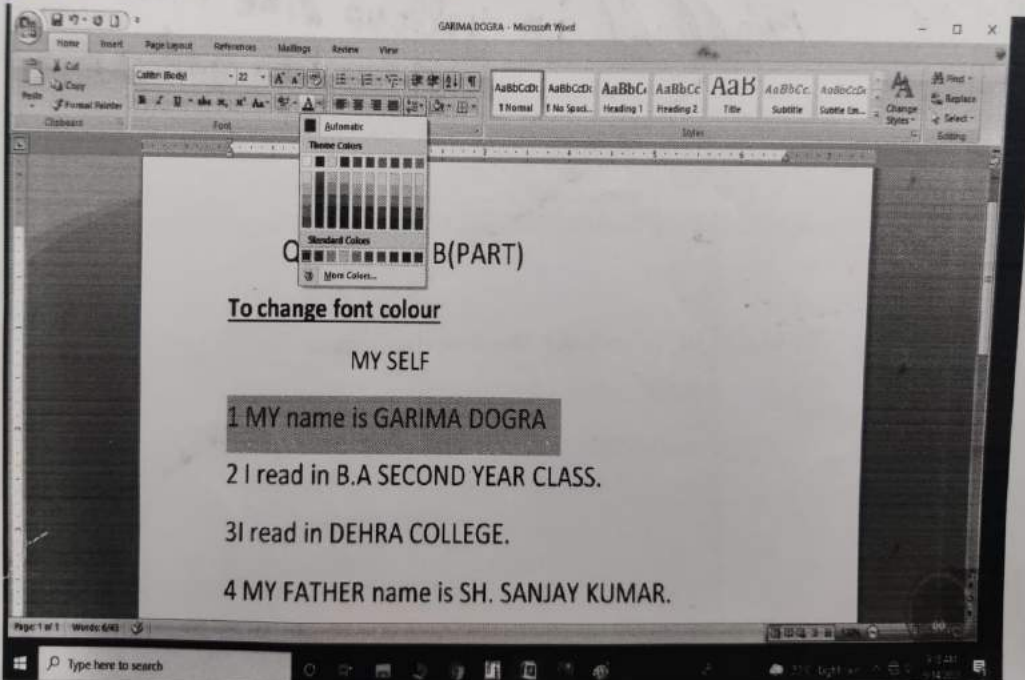
QUESTION;6

To change the font Size

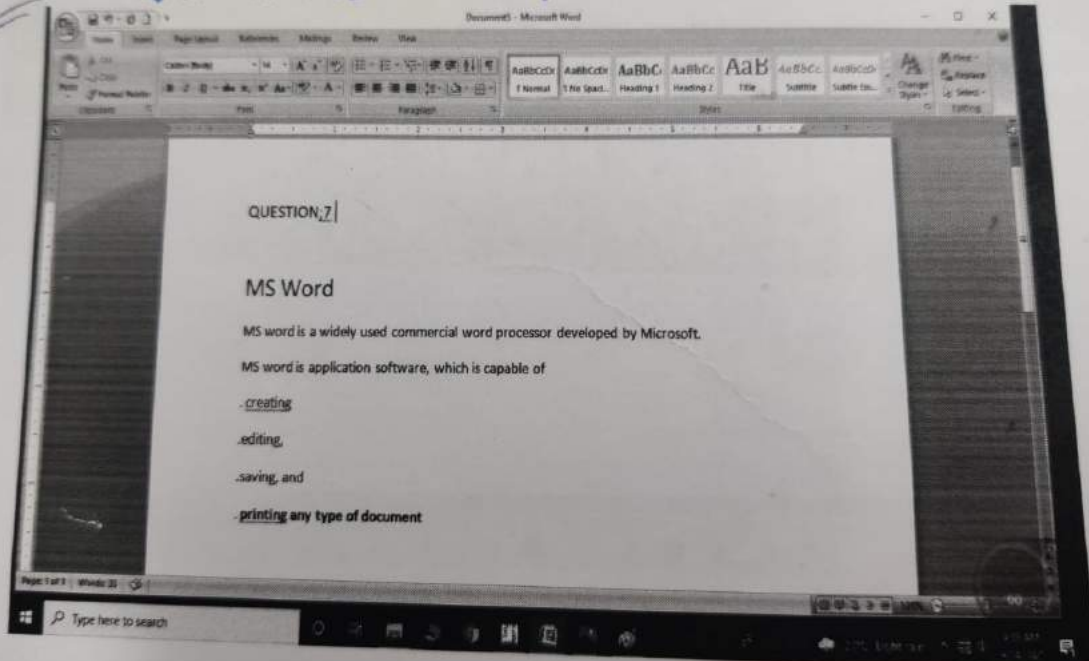
MY SELF

1. My name is Garima dogra
2. My father is a shopkeeper.
3. My mother is a house wife .
4. My father name is a SH.RAVINDER KUMAR.
5. My mother name is SMT. SHOBHA.

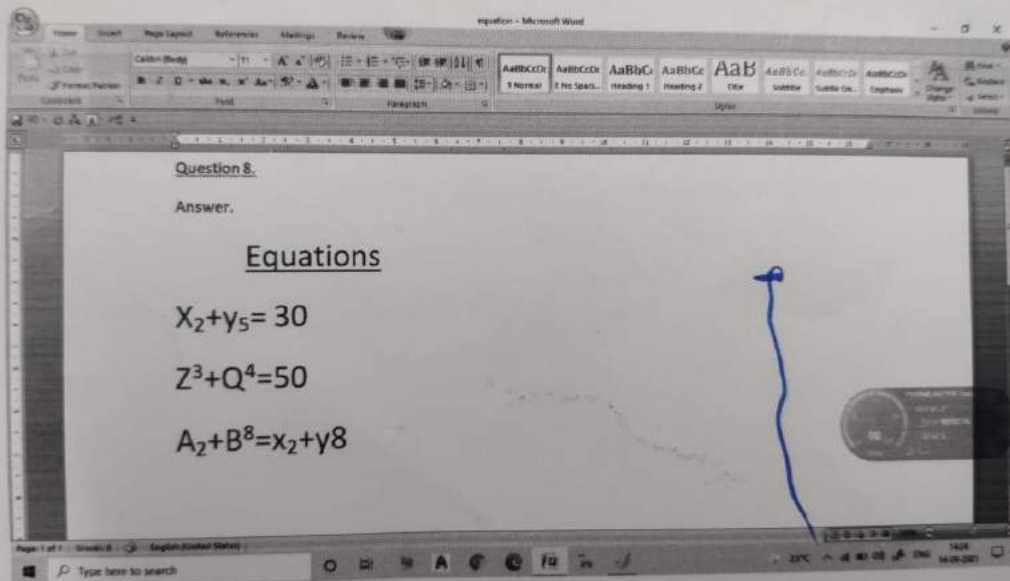
Q6. Font color change



Q7 - Create MS file to create document and save it MS word?



Q8 - Create MS file and save it with 'Equation'?



Question 8.

Answer.

Equations

$$X_2 + y_5 = 30$$

$$Z^3 + Q^4 = 50$$

$$A_2 + B^8 = x_2 + y_8$$

Question 9.

Create as Table

Select the text you want to convert	Select the insert tab
Click on the TABLE command. A dialog box appears	Click on convert text to table , a new dialog box appears
Here set number of coloumns.	Click on OK finally selected text convert in a table.

Q10.

Insert a Table

Q11.

Create a worksheet in Msexcel and save it.

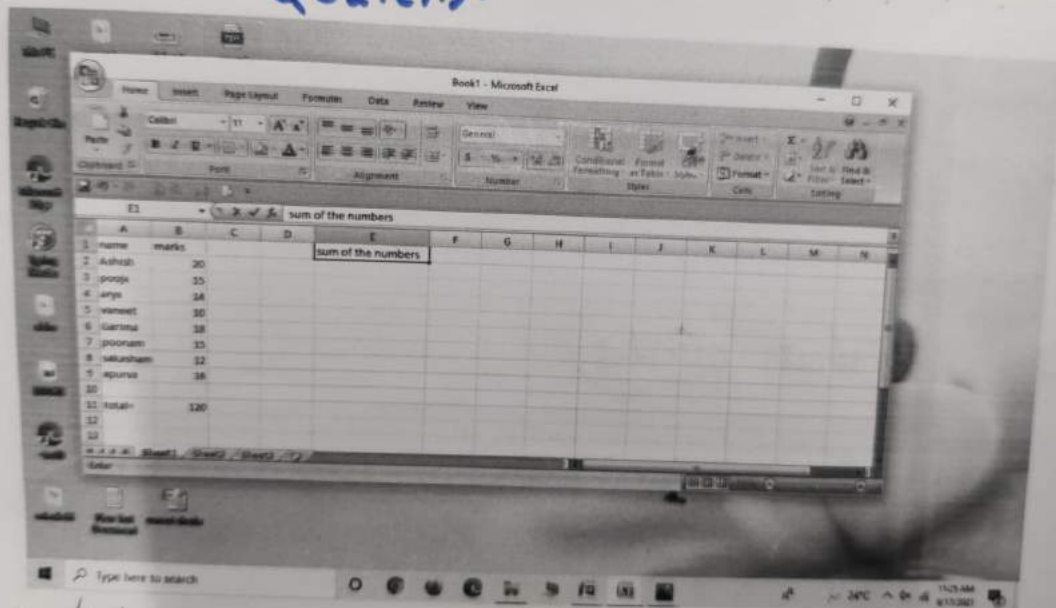
1	NAME	MARKS
2	AJAY	55
3	RAJAT	76
4	VIKAS	87
5	ANKIT	74
6	AVAY	90
7	ARYAN	84
8	CHIRAG	67
9		
10		
11		
12	minimum mark	55
13		
14		

Minimum Marks

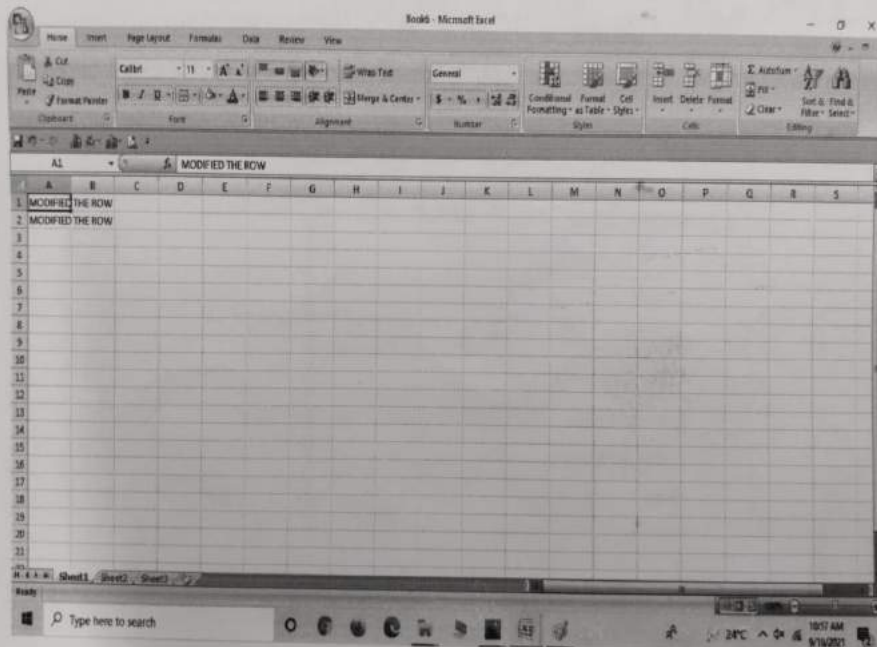
Q12. (Highest marks)

[illegible]

Q12. (a) The sum of marks in range of (C2:C11).



Q13. (b) Modify the Row



Ques 13 Describe following terms in the worksheet

➤ Absolute reference and relative reference in formula

➤ cell address

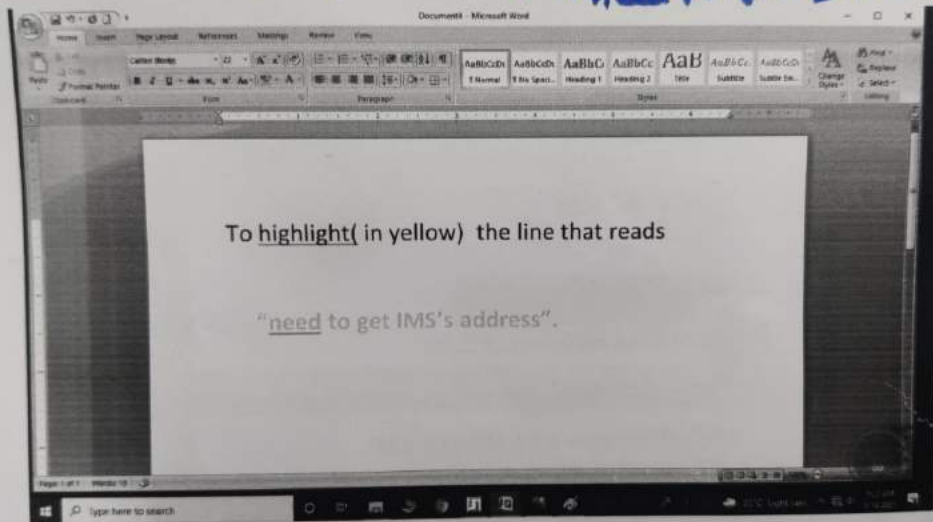
-(a) Relative and absolute references behave differently when copied and filled to other cells. Relative references change when a formula is copied to another cell. Absolute references, on the other hand, remain constant no matter where they are copied.

(b) A reference is a cell's address. It identifies a cell or range of cell by referring to the column letter and row number of the cell.
For example:

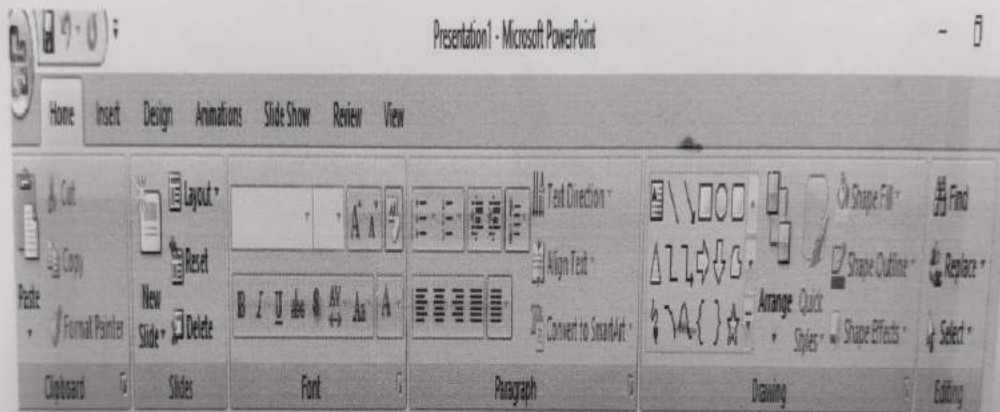
A1 refers to the cell at the intersection of column A and row 1

Q 6(b)

Highlight in yellow line that reads
"need to get IMS address".

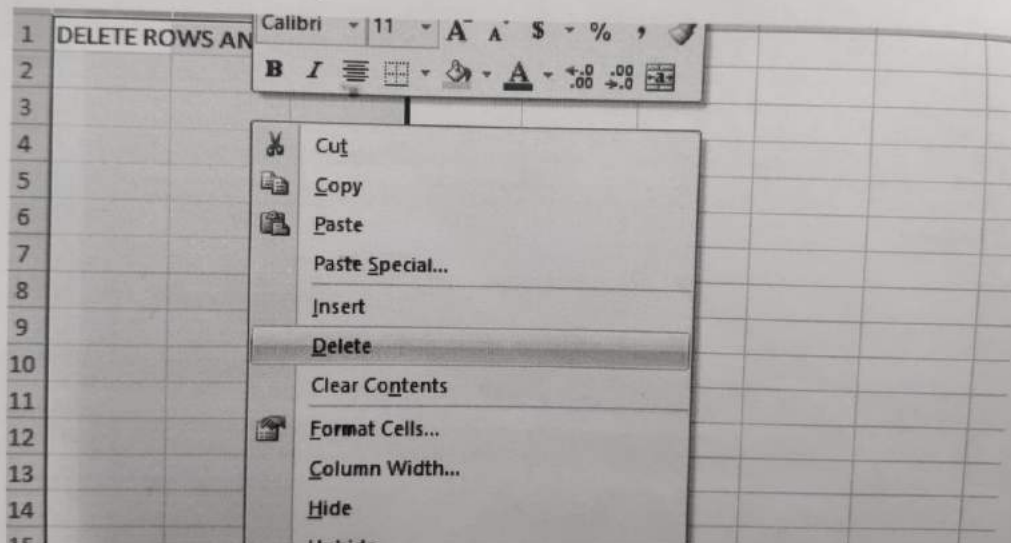


Q14 (a) What tools are available in Powerpoint



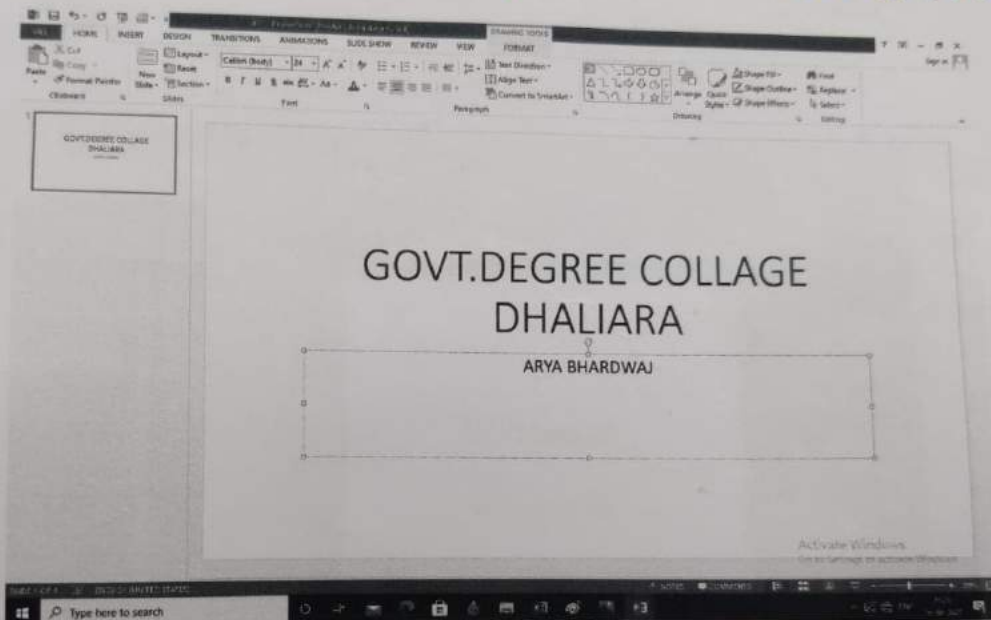
Q13. (c)

Row Delete

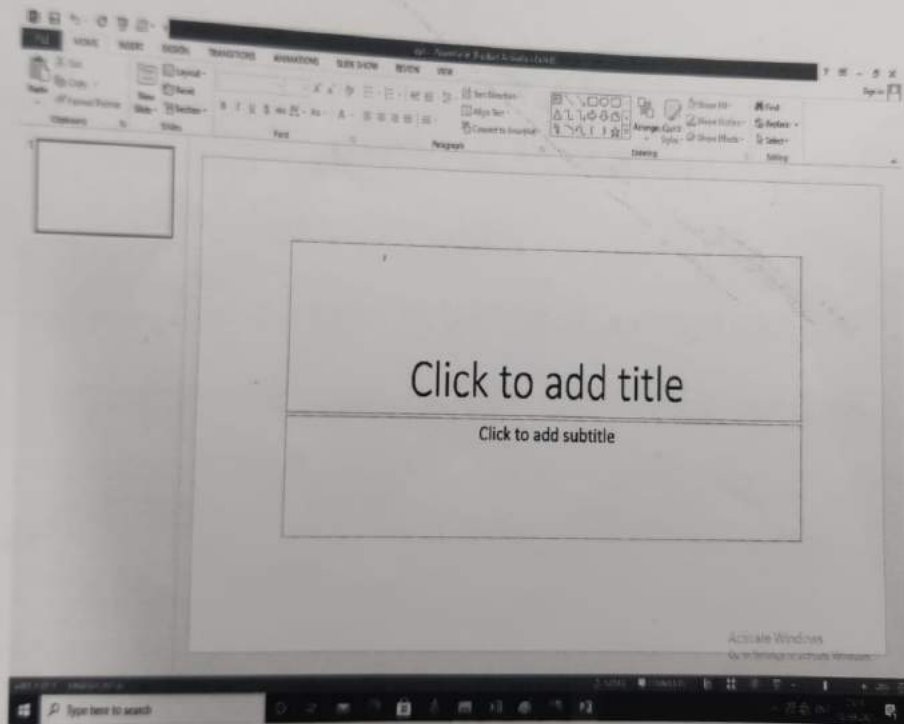


Q14. (b)

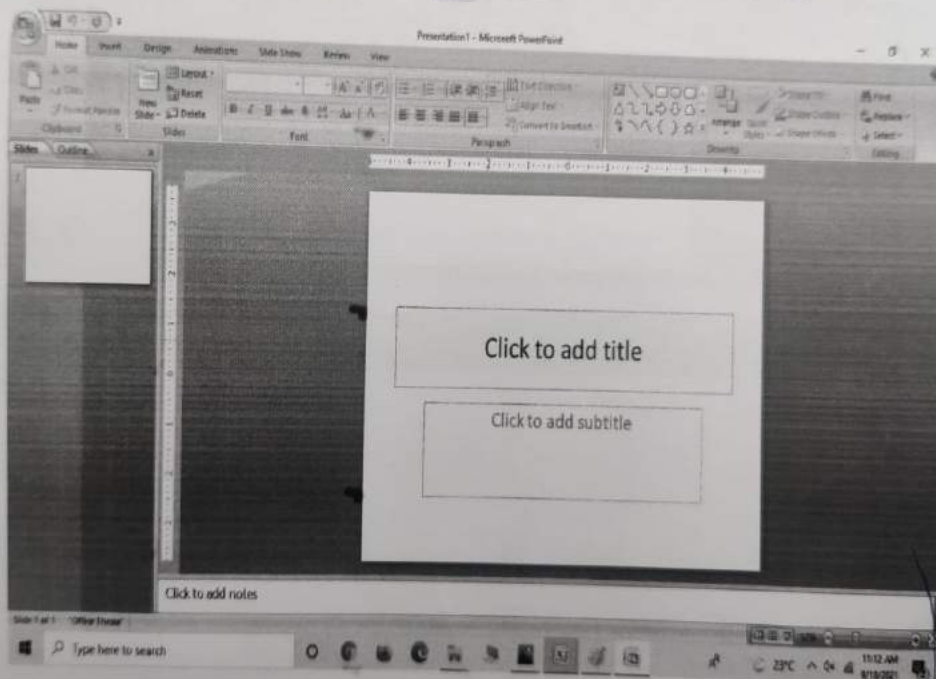
Save the presentation lab 1. PPT.



Q14 (b) (2).



14 (b) open a Blank Presentation



Ques 16 What is the difference between Machine language and High Level Language?

Ans 16 Machine language

High-Level Language

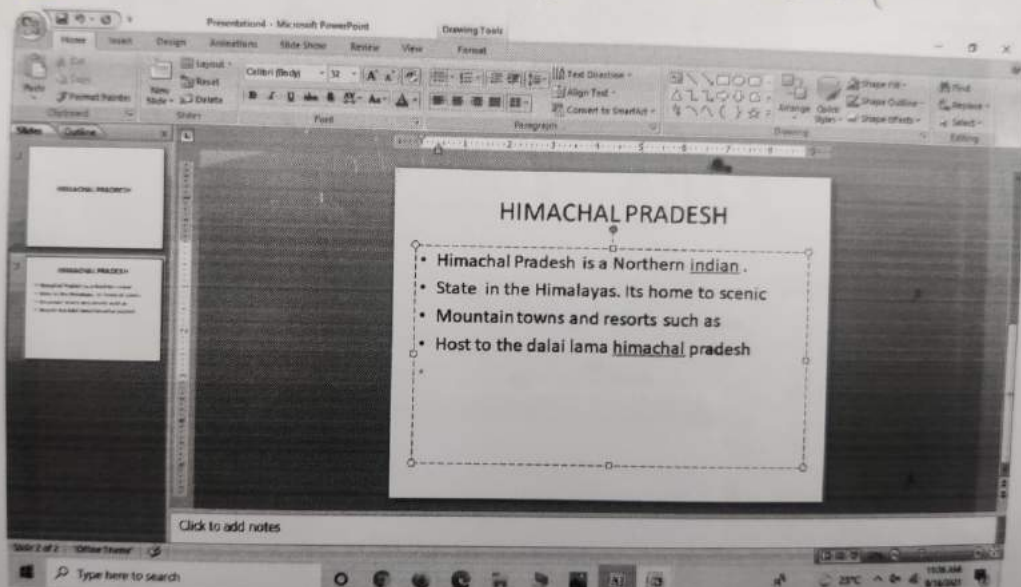
- It's the language of machines, consisting of bits (1s and 0s) put together into chunks like bytes, a group of 8 bits and lots of other larger sizes.
- It's highly unlikely you will ever have to write in machine language, but in the old days, we used to plot 1s and 0s on graph paper and then type them in, to make pictures appear on the computer screen.
- It can be easily interpreted as well as compiled in comparison to low-level language.
- It can be considered as a programmer-friendly languages.
- It can be run on different platforms.
- Examples of high level language include C, C++, Java, python.

Ques 17 Discuss about different data types of programming language?

Q.15 clip Art and Text.



Q.15 (b) Title Slide & Bullets slide



(C) $Z = 40 \times 2/10 - 2 \div 10$

① Multiply the numbers

$$Z = \frac{40 \cdot 2}{10} - 1 \cdot \frac{2}{10}$$

$$Z = \frac{80}{10} - 1 \cdot \frac{2}{10}$$

② Divide the numbers

$$Z = \frac{80}{10} - 1 \cdot \frac{2}{10}$$

$$Z = 8 - 1 \cdot \frac{2}{10}$$

③ Divide the numbers

$$Z = 8 - 1 \cdot \frac{2}{10}$$

$$Z = 8 - 1 \cdot \frac{1}{5}$$

$$Z = 8 - 1 \cdot \frac{1}{5}$$

$$Z = 8 - \frac{1}{5}$$

Subtract the numbers

$$Z = 8 - \frac{1}{5}$$

$$Z = \frac{39}{5} \text{ Ans}$$

Ans^o 17 The C language provides the four basic arithmetic type specifiers char, int, float and double, and the modifiers signed, unsigned, short, and long.

Data Types	Bytes	Range
Signed Char	1	-128 to 127
Unsigned Char	1	0 to 255
Float	4	$1.2E-38$ to $3.4E+38$
Double	8	$2.3E-308$ to $1.7E+308$

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Ques 18 Find the output of the following expressions

(a) $x = 20/5 \cdot 2 + 30 - 5$

① Divide the numbers

Solve: $x = \frac{20}{5} \cdot 2 + 30 - 5$

$$x = 4 \cdot 2 + 30 - 5$$

② Multiply the number

$$x = 4 \cdot 2 + 30 - 5$$

$$x = 8 + 30 - 5$$

③ Add the numbers

$$x = 8 + 30 - 5$$

$$x = 33 \text{ Ans}$$

(b) $y = 30 - (40/10 + 6) + 10$

① Divide the numbers

$$y = 30 - \left(\frac{40}{10} + 6\right) + 10$$

$$y = 30 - (4 + 6) + 10$$

② Add the numbers

$$y = 30 - (4 + 6) + 10$$

$$y = 30 - (10) + 10$$

③ Multiply the numbers

$$y = 30 - 1 \cdot 10 + 10$$

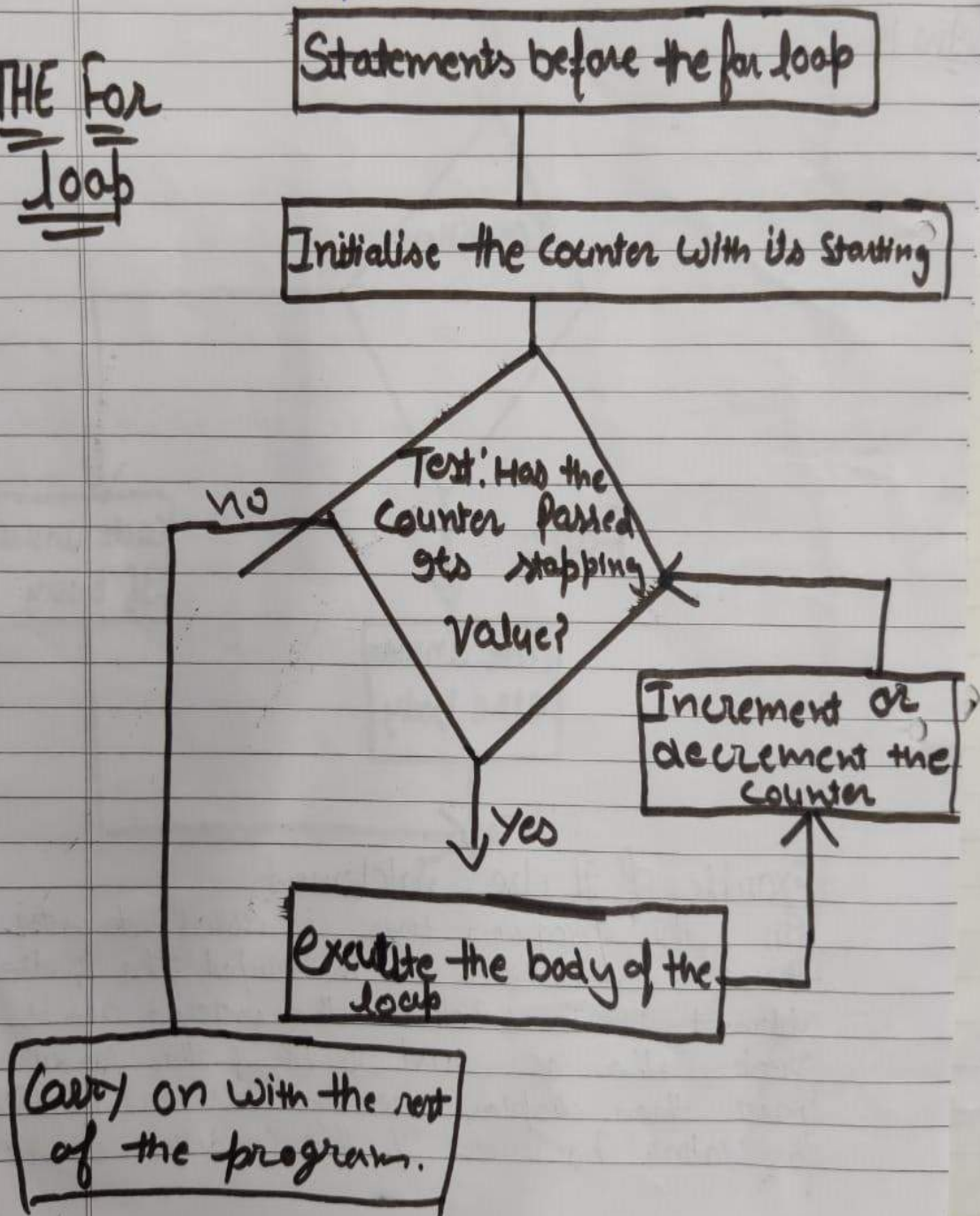
$$y = 30 - 10 + 10$$

$$y = 30 - 10 + 10$$

$$y = 30 \text{ Ans}$$

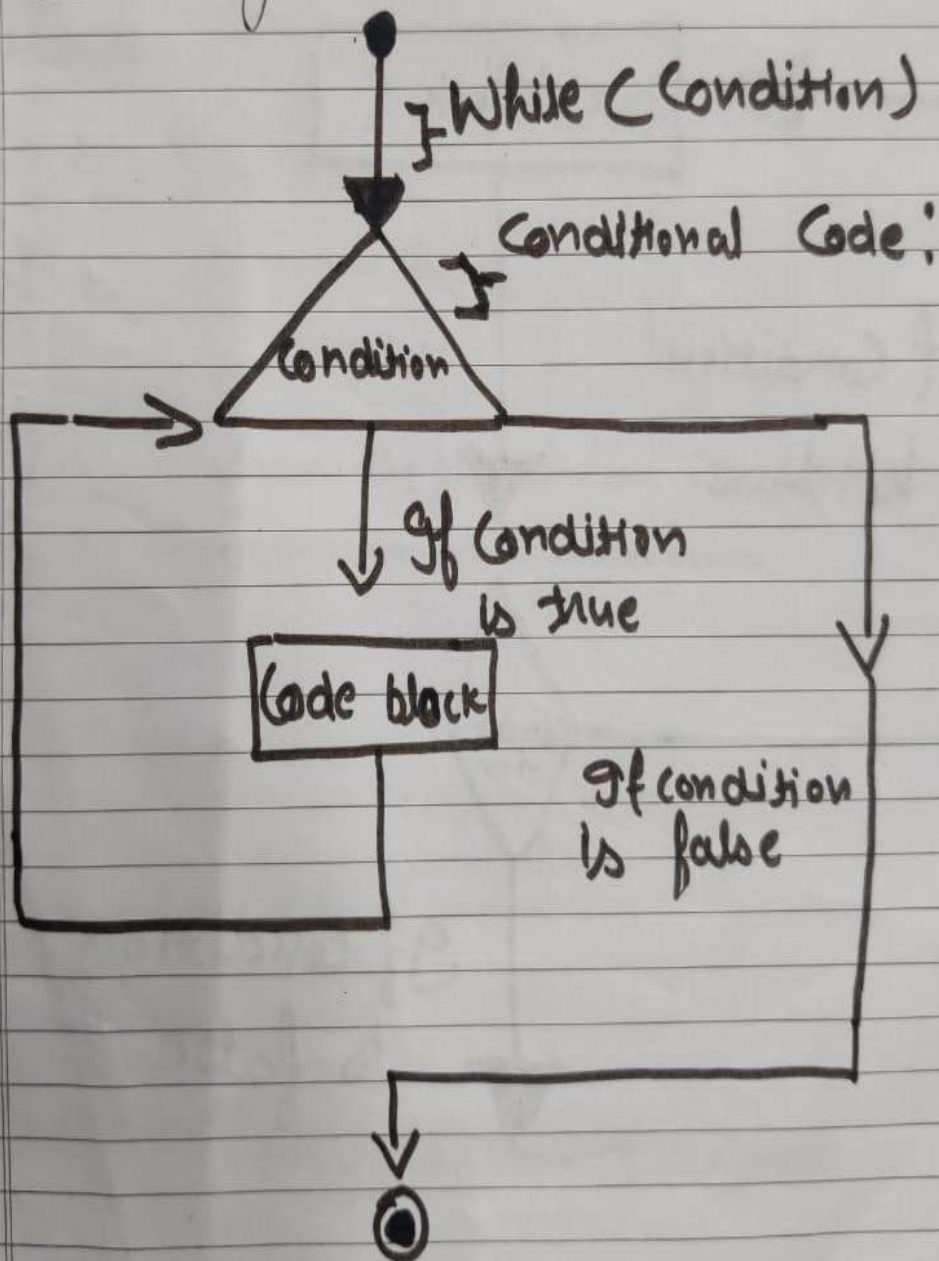
meet then display a different message "you are not eligible for voting."

THE For Loop

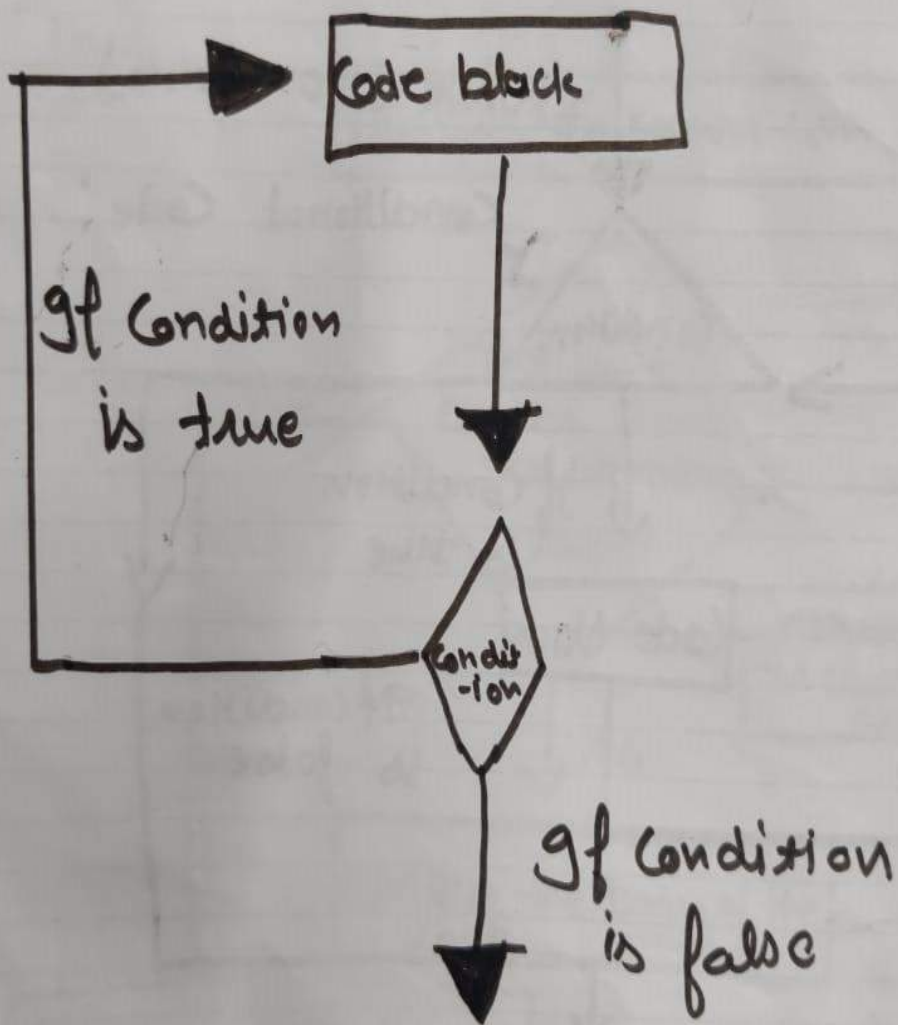


When the Condition becomes false the program control passes to the line immediately following the loop.

Flow Diagram



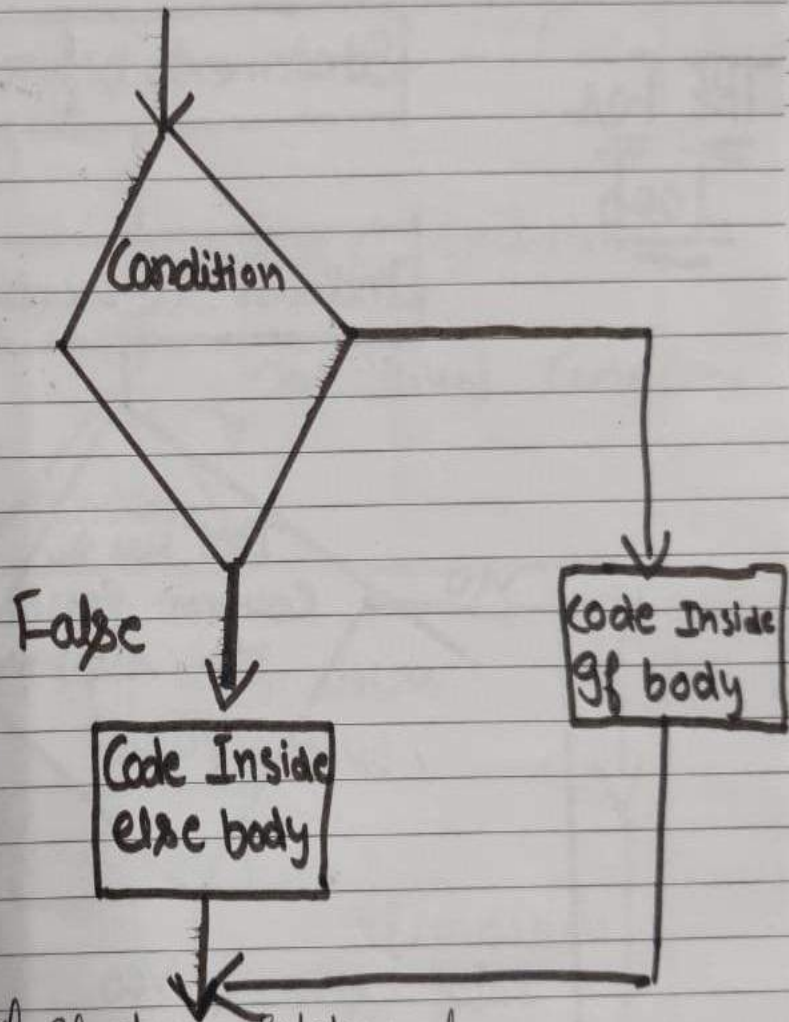
do {
Conditional code;
while (Condition)



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Ques: 19 Describe the syntax of the following Statements

Ans: 19



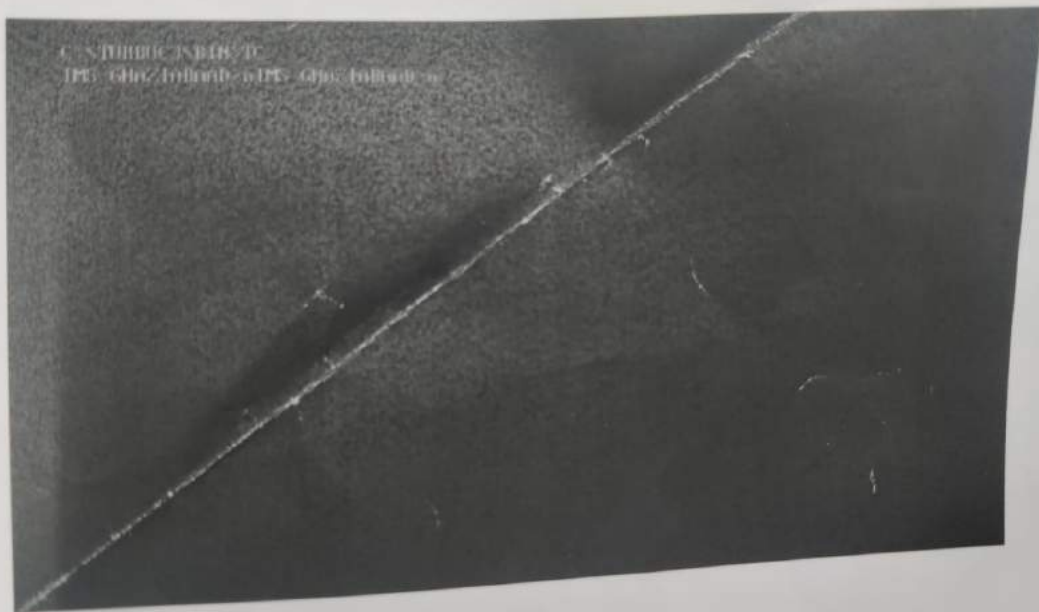
Example of if else Statement

In this program user is asked to enter the age and based on the input, the if else statement checks whether the entered age is greater than or equal to 18. If this condition is met then display message "You are eligible for voting" however if the condition doesn't

Q20. (c) Largest number

```
C:\TURBOC3\BIN>TC
largest number is 100/nlargest number is 100/n
```

Q20. (a) for loop 'IMS GHAZIABAD' ?



Q20. (b)

IMS GHARHABAD.

