

CCA-101 - Fundamentals of IT & Programming Assignment - 1

Q1. What are the four fundamental parts of computer? Explain in with the help - - - ?

Ans Four fundamental parts

- 1) Input unit 2) output unit 3) Control processing unit (CPU)
- 4) memory unit / storage unit

Input unit :- Input units are all the devices you use to feed information to the computer, such as keyboard, mouse, a hard drive. These devices, in essence bring data from the "outside world" into your computer.

Output unit :- Output units are the devices used to transmit a computer's data between devices or client. The bulk of computer output data designed for people is in audio or video format such as monitors, printers, microphones, projectors and headphones.

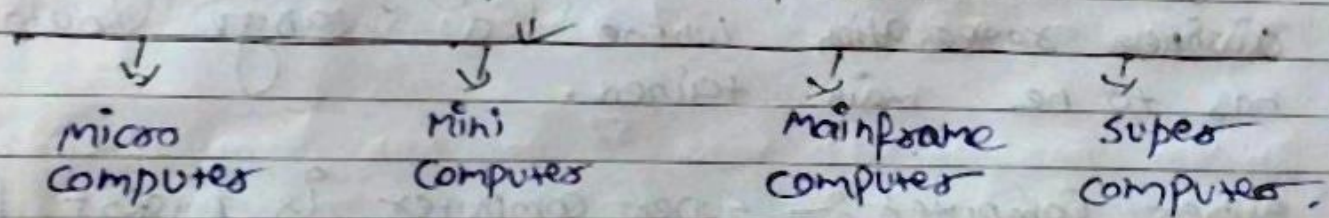
CPU :- CPU is considered as the brain of the computer. It performs all types of data processing operations. It stores data, intermediate results and instructions. It controls the operation of all parts of the computer. CPU itself has three components. (1) Control Unit (2) ALU (Arithmetic Logic Unit)

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Memory or storage unit :- Once the CPU converts a specific set of a computer program into machine code it stores that code in primary storage or memory. The machine code will be treated as either data and instructions from memory. It uses an instruction to manipulate the data and then sends the result and the next set of instructions back to memory.

Discuss about the classification of computer based on size and capacity.

Computer Classification



Micro Computer :- you can see such computers at home like laptop, desktop, smartwatch, tablets. All computer's components of a microprocessor are on a single integrated circuit chip. The microprocessor based computers are called third generation computer, they were invented in the 1970's.

Mini Computer :- Mini computers were introduced in the 1960's. They were faster than micro computers. Basically these computers were mainly multi-user systems where many users work on the systems. Generally these types of computers had larger memories and greater storage capacity. You can

can see son computers at the billing counter of malls or large institutions. minicomputer was a multi user system which means more than one user could use this system simultaneously.

Mainframe :- mainframe computers are large and expensive machines. The word length of mainframe computers may be 48, 60 or 64 bits. memory capacity being in some megabytes and storage capacity in some terabytes. Generally they handle huge volumes of information and data. In terms of speed, they are having significant processing capacity. they are used in research organizations, large industrial business reservation where a large database has to be maintained.

Super Computer :- super computer is biggest fastest computer. The processing capabilities of super computer lies in the range of 10^9 to 10^{10} ops/sec. word length 64-128 or may be in 256 or 512. The memory capacity of super computer is in some gigabytes or in terabytes. these computers are specifically designed for scientific applications, weather forecasting, encryption decryption of passwords, testing for nuclear weapons, scientific research of earth.

The modern computer took its shape with the arrival of you time. It had been around 16th century when the evolution of the computer started. The initial computer faced many changes, obviously for the betterment. It continuously improved itself in terms of speed, accuracy, size, and price to urge the form of the fashionable day computer. This long period is often conveniently divided into the subsequent phases called computer generations.

There are five generations of the computer:-

- 1) First generation (1946 - 1959)
- 2) Second generation (1959 - 1965)
- 3) Third generation (1965 - 1971)
- 4) Fourth generation (1971 - 1980)
- 5) Fifth generation (1980 -)

There are Five generations of the Computer.

1. First Generation (1940-1956)
2. Second Generation (1956-1963)
3. Third Generation (1964-1971)
4. Fourth Generation (1971 - 20)
5. Fifth Generation

1. First Generation :->

The First Generation of Computer used vacums tubes as a major piece of technology. Vacums Tubes were widely use in computers from 1940 through 1956. Some of the First generation Computers took up an entire room. The ENIAC is a great example of the first generations of the Computer.

2. Second Generation :->

In the 1950s, transistors replaced tubes and used magnetic cores for memories (IBM 1620 Honeywell 800) Size was reduced and reliability was significantly improved. See IBM 1401 Honeywell.

3. Third Generation :->

Third Generation of Computer

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Used the first integrated circuits (IBM 360, CDC 6400) and the first spreading system and database management systems.

4 Fourth generation \Rightarrow

The Mid to late 1970s spawned the Microprocessor and personal computer. Introducing distributed processing and office automation word processing, query languages, report writers and spreadsheets put large numbers of people in touch with the computers for the first time.

5. Fifth Generation \Rightarrow

The 21st Century ushered in the fifth generation which is said to deliver various forms of artificial intelligence (AI).

Q4) Differentiate between Volatile and non volatile memories?

Ans Volatile memory

1) Vm is the type of memory in which data is lost as it is power off.

2) This memory are stored temporarily.

3) It is faster than non-volatile memory.

4) Example - RAM

5) In Vm process can read and write.

6) Volatile memory is more costly per unit size

Non volatile memory

1) Non Vm is the type of memory in which data remains stored even it is powered off.

2) This memory are stored Permanently.

3) It is slower than volatile memory.

4) Example -> ROM

5) A Non Vm memory process can only read

6) Non-Volatile memory is less costly per unit size

Q5 Distinguish among System Software, application software and open source software on the basis of their features.

Ans Software is a set of programs. which is designed to perform a well-defined function. A program is a sequence of instructions written to solve a particular problem.

1. System Software :-

The system software is a computer of programs designed to operate, control and extend the processing capabilities of the computer it ~~soft~~. Self-system software is generally prepared by the computer manufacturers, which interact with the hardware at a very basic level. System software serves as the interface between the hardware and the end users.

Some examples of system software are operating system, computer, interpreter, assemblers etc.

Here is a list of some of the most prominent features of a system software :-

1. Close to the system.
2. Fast in speed.

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3. Difficult to design.
4. Difficult to understand.
5. Less interactive.
6. Smaller in size.
7. Difficult to manipulate.
8. Generally written in low-level language.

Q) Application Software :-

Application Software Products are designed to satisfy a particular need in a particular environment. All software applications prepared in the computer lab can come under the category of Application software. It may consist of a single program such as Microsoft's Notepad for writing and editing a simple text. Such as a spreadsheet package.

Examples of Application Software are the following :-

1. Payroll Software.
2. Student Record Software.
3. Inventory management Software.
4. Income Tax Software.
5. Railways Reservation Software.
6. Microsoft Office Suite Software.
7. Microsoft Word.
8. Microsoft Excel.
9. Microsoft Power Point.

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Features of Application Software are as follows:-

1. Close to the user.
2. Easy to design.
3. More interactive.
4. Slow in Speed.
5. Generally written in high-level language.
6. Easy to understand.
7. Easy to manipulate and use.
8. Bigger in size and requires large storage space.

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Q6 (A) Create a File in MS-Word to insert a paragraph about yourself and save it with File name "yourself". Describe all steps involved in it.

Following Steps

- Ans
1. Open Word (1) Click the Particular Paragraph
 2. Select Blank document (2) then click Ctrl+C (copy)
 3. Click on the Blank page (3) Click the start button
 4. then click Ctrl+S (4) Click all programmes
 5. write the file name (5) find the Microsoft office.
 6. Click Enter. (6) Click Microsoft office word
- What you want to insert a page.

Q7 Write steps regarding Followings:-

1. To Change the Font style.
2. To Change the Font Size.
3. To Change the Font color.
4. To highlight (in yellow) the line that reads "Need to get /Ms's address"

1. To Change the font style.

1. select the Particular text / line / Paragraph you want to modify.
2. Click the drop down arrow to the font box on the Home tab.
3. Move the mouse pointer over the various fonts.
4. Click on particular font you want to use.

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(2) To change the font size.

- 1) Select the text / line / Paragraph you want to modify.
- 2) Click the drop down arrow next to font size bar on the Home tab.
- 3) Click the desired font size from the menu.

(3) To change the font color.

- 1) Select the text / line / Paragraph you want to modify.
- 2) Click the drop down arrow next to font color.
- 3) Click the particular colour you want to use.

4) To highlight in yellow the line that needs to get address.

- 1) Select the line you want to highlight.
- 2) Click drop down arrow to display the highlight color menu.
- 3) Click on the yellow colour.

Q7 Create a file in MS-Word for the following document and save it with file name MS-Word. Describe all steps involved in it.

MS Word

MS Word is a widely used commercial word processor developed by Microsoft. MS Word is an application software which is capable of

- creating
- saving
- editing
- printing any type of document

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Ans

<Creating>

1. Open Ms word
2. Write down the following document.

Editing

- 1) Select Particular text/line that you want to modify
2. Click drop down arrow next to font size box on the Home tab.
3. Click the Particular size.

1. Select the Particular text/line that you to modify
2. Click on the drop down arrow.
3. Click the Red color

1. Select the Particular line/text that you want to modify
2. press $Ctrl + U$
3. Select the Particular line/text that you want to modify
4. press $Ctrl + I$

Saving

1. press $Ctrl + S$
- 2) write Ms word file name \rightarrow click enter Printing any type of document

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3) Press $\text{Ctrl} + \text{P}$.

Q8 Create a file in MS-Word for the following document and save it with file name equations. Describe all steps involved in it.

Equations.

$$x_2 + y_5 = 30$$

$$z_3 + a_4 = 50$$

$$A_2 + B_8 = x_2 + y_8.$$

Ans Following steps

- 1) open a MS word.
- 2) write the particular word / line / paragraph.
- 3) select a particular word.
- 4) Press $\text{Ctrl} + \text{U}$

$$x_2 + y_5 = 30$$

- 1) Type X
- 2) Press $\text{Ctrl} + =$ Sign. Key
- 3) 2 Press (Numerical key)
- 4) Press Shift +
- 5) type y
- 6) Press $\text{Ctrl} + =$
- 7) type 5
- 8) Press = Sign Key
- 9) type = 30

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$$Z_3 + Q_4 = 50$$

- 1) Press Z
- 2) Press Ctrl + Shift ++
- 3) Press 3 (Numeric Key)
- 4) Press Shift + sign key
- 5) Press 0
- 6) Press Ctrl + Shift ++
- 7) Press = sign key
- 8) Press 50 (Numeric Key)

$$A_9 + B_8 = X_2 + Y^8$$

- 1) Type A
- 2) Press Ctrl ++
- 3) Press 2 (Numeric Key)
- 4) Press B key
- 5) then Press Shift ++
- 6) Press B key
- 7) then Press Ctrl + Shift ++
- 8) type 8
- 9) Press = sign key
- 10) type X
- 11) then Press Ctrl ++
- 12) Press Shift + = sign key
- 13) type Y
- 14) Press Ctrl + Shift ++

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Q9

Create a File in MS-Word that convert existing highlight text to table as shown below and save it as file name text-to-table. Describe all steps involved in it.

- 1) Open a MS-Word.
- 2) type a particular Paragraph.
- 3) select the particular words in the Paragraph.
- 4) then press Ctrl+B
- 5) Select whole Paragraph you want to convert.
- 6) select the Insert tab.
- 7) Click on Table Command.
- 8) Click Dialog box appears here set Number of Columns.
- 9) then Click OK.

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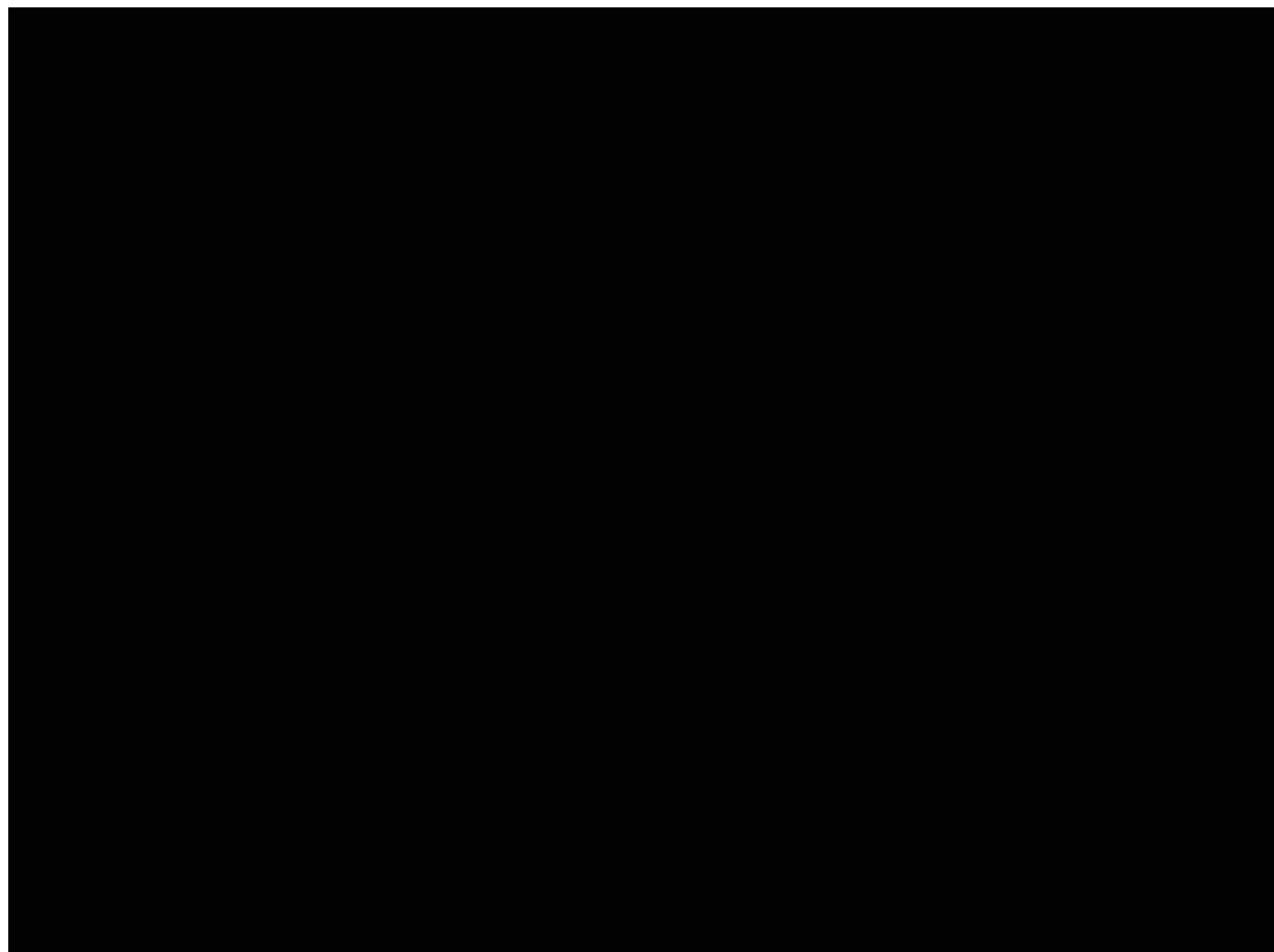
- Open a blank workbook
- In the top ribbon, Press Insert
- Click on the table button
- Either use the diagram to select the number of columns and rows you need, or click Insert table and a dialog box will appear where you can specify the number of columns and rows.

Q11 Create a Following worksheet in MS-Excel and save it with name 'book1'

Ans Following Steps :-

1. open a MS excel
2. Click on A1 cell and type Roll No.
3. Press Enter.
4. type All data in a Range of cells C2 : C11 (1, 2, 3, 4, 5, 6, 7, 8, 9, 10)
5. Click on A B1 cell and type Name.
6. Press Enter.
7. type All data in a Range of cell B2 : B11 (h₁, h₂, ... h₁₀)
8. Click on A C1 cell
9. Press Enter
10. type All data in a range of cell C2 : C11 (35, 34, 95, 65, 75, 67.)
11. Press ~~Ctrl~~ + S
12. type book1
13. then Click Enter.

- Open a blank workbook
- In the top ribbon, Press Insert
- Click on the table button
- Either use the diagram to select the number of columns and rows you need, or click Insert table and a dialog box will appear where you can specify the number of columns and rows.



Q130) Describe various steps involved in the following.

- > To modify column width of a worksheet.
- > To modify the row height of a worksheet.
- > To delete rows and columns of a worksheet.

Following steps :-

A) Steps :-

- 1) open a MS excel.
- 2) select a column that you want to modify.
- 3) Click on a Home tab.
- 4) Click on a Cell group.
- 5) select Format > Column.
- 6) Type the column width.
- 7) Click enter.

B) Steps :-

- 1) open a MS excel.
- 2) select a row that you want to modify.
- 3) Click on a Home tab.
- 4) Click on a Cell group.
- 5) select Format > Row.
- 6) type the Row height.
- 7) Click OK.

C) Steps :-

- 1) Open a MS excel.
- 2) Right Click on a row and columns that you want to delete.
- 3) then press Delete Key.
- 4) Click OK.

Q138 Describe Following terms in the worksheet.

- Absolute reference and relative reference in formula.
- Cell address.

Following steps:-

Absolute reference.

- 1) Open a MS excel.
- 2) Select the cell that will contain the formula.
- 3) Enter the formula to calculate the desired value.
- 4) Press enter on your keyboard.
- 5) The formula will calculate and the result will display in the cell.
- 6) Locate the fill handle in the lower right corner of the desired cell.
- 7) Click, hold, and drag the fill handle over the cell you want to fill.
- 8) Release the mouse.
- 9) The formula is copied to the selected cell with an absolute reference.
- 10) The values will be calculated in each cell.

Relative reference:-

- 1) Open a MS excel.
- 2) Select the cell that you want to contain the formulas.
- 3) Enter the formulas to calculate the desired value (cell1 + cell2).
- 4) Press enter on your keyboard.
- 5) The formula will be calculated and the result will be displayed in the cell.
- 6) Locate the fill handle in the lower right corner of the desired cell.

7) Click, hold and drag the Fill handle over the cells you want to fill.

8) Release the mouse.

9) The formula will be copied to the selected cells with Relative References.

10) The values will be calculated in each cell.

Q14A What tools are available to customize our PPTX?

- 1) Changing Page Setup Options.
- 2) Changing to view in color / grayscale.
- 3) Navigating using Presentation views.

In Normal view.

In Slide Sorter view.

In Reading view.

In Slide Show view.

Q14B Write the steps for the following action for creation of PPTX?

1. Open a Blank Presentation.

Following Steps:-

1. Open Power point
2. Press Ctrl + M.
3. then "

2. Save the presentation as Lab1 pptx.

Following Steps:-

1. Press Ctrl + S
2. type Lab 1 PPTX
3. then Ctrl + C.

3. Add a Title to the first slide: the name of your college.

Following steps:-

1. Open a power point.
2. Click on the First slide.
3. then place your cursor in the Click to add title " box on the slide.
4. type Particular College Name that you want.

4. Type your First name and last name in the subtitle section

Following steps:-

1. Open a power point.
2. Click on First slide.
3. then place you cursor in the "Click to add subtitle" box on the slide.
4. type First Name and last Name.

5. Add a New slide which has a Title and Content.

Following steps:-

- 1) Open a power point.
- 2) Go to the "Home" tab.
- 3) then click New slide.
- 4) Click on a title and Content.

3. Add a Title to the first slide: the name of your College.

Following steps:-

1. Open a power point.
2. Click on the First Slide.
3. then place your cursor in the Click to add title " box on the slide.
4. type Particular College Name that you want.

4. Type your First name and last name in the subtitle section

Following steps:-

1. Open a power point.
2. Click on First slide.
3. then place you cursor in the "Click to add subtitle" box on the slide.
4. type First Name and last Name.

5. Add a New Slide which has a Title and Content.

Following steps:-

- 1) Open a power point.
- 2) go to the "Home" tab.
- 3) then click New Slide.
- 4) Click on a title and Content.

Q15 Write steps for creation of a set of Power Point Slides that demonstrates your skill to use the tools of Power Point. It should include the following things.

1. Title slide & bullet list.

Following steps:-

1. Go to the MS Power Point.
2. Click the New Slide list arrow.
3. Select the title slide.

1. Title slide & bullet list.

1. On the slide select the line output in a text placeholder that you want to add bullets.

2. Go to Home tab.

3. In the paragraph group click Bullets.

2.

1. Go to MS Power point.

2. Click on the Insert tab.

3. Then click Object.

4. Select create from file.

5. Click Browse.

6. Select your Excel file (link)

7. Before you close the Insert tab

8. Then select link and click OK.

- 1) Go to MS power point.
- 2) Click on the slide that you want to insert a clip art file.
- 3) Go to Insert tab.
- 4) Select clip art from the Image group.
- 5) Type a word or phrase that will describe the image you search for.
- 6) Press enter key.
- 7) Select "clipart" if you want only clip art results.
- 8) Select a picture you want to use.
- 9) Then click "Insert".

4)

- 1) Open a MS power point
- 2) Click the slide that you want to animate.
- 3) Click the animation tab.
- 4) Click the more arrow in the animation box.
- 5) You can also add entrance, emphasis, or exit animations.
- 6) Select that animation you want to use.
- 7) Click OK.

Q16 What is the difference between machine language and high level language?

High Level Language	Low Level Language
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1) It is programmer friendly language.

1) It is a machine friendly language.

2) High level language is less memory efficient.

2) Low level language is high memory efficient.

3) It is easy to understand.

3) It is tough to understand.

4) It is simple to debug.

4) It is complex to debug comparatively.

5) It is simple to maintain.

5) It is complex to maintain comparatively.

6) It is portable.

6) It is non-portable.

7) It can run on any platform.

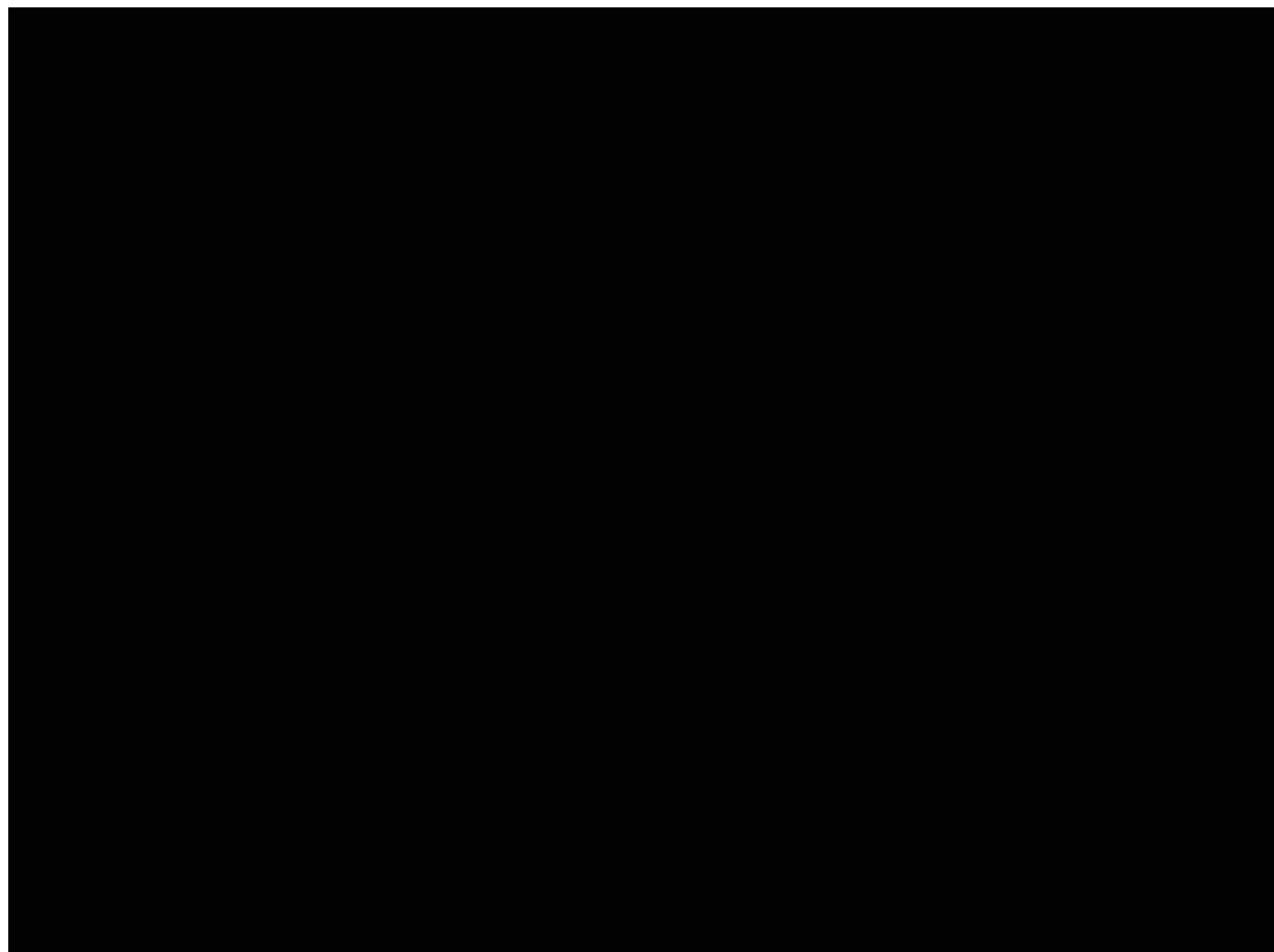
7) It is machine-dependent.

8) It needs compiler or interpreter for translation.

8) It needs assembler for translation.

9) It is used widely for programming.

9) It is not commonly used now-a-days for programming.



d) Do while loop

do { statement; }

while (condition);

Q. Find the output of the following program.

```
#include <stdio.h>
int main ()
{
    int i;
    for (i=1; i<=10; i++)
    {
        printf ("MS bhazibond\n");
    }
}
```

MS bhazibond