CCA-101 : Fundamentals of IT & programming

CC A

Assignment - I

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B.Sc [CS] 3rd year

13/02/2023

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Assignment-1

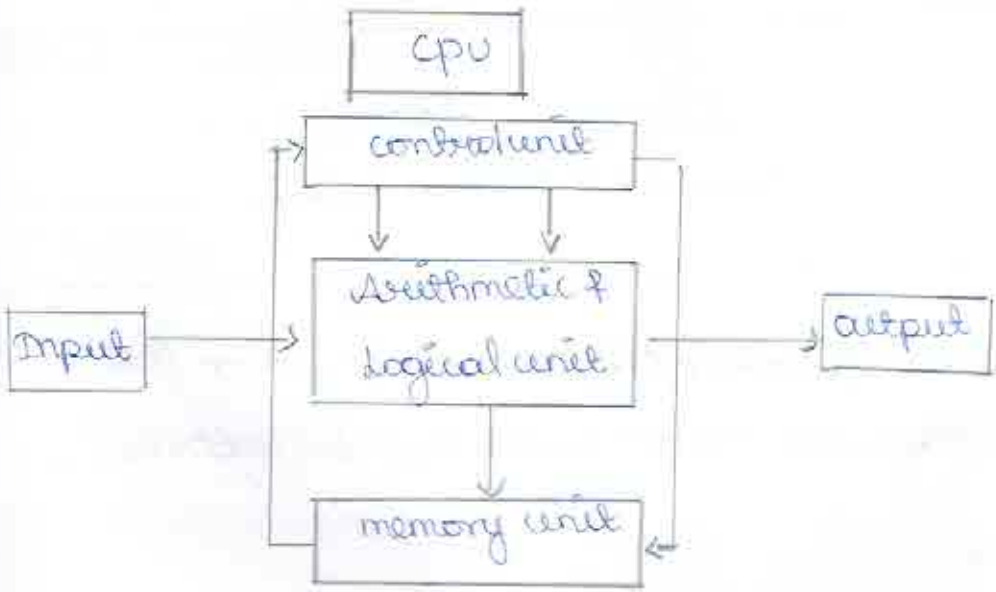
1) Four Fundamental parts of computer & diagram

=> Memory unit

=> control unit

=> Arithmetic unit

=> Logical unit



2) classification of computers based on size and capacity:

There are four types in the classifications of the computer by size:

=> Super computer

=> mainframe computer

=> mini computer

=> micro computer

4) D/B volatile & Non-volatile memory.

volatile memory	Non-volatile memory
computer memory that requires constant power to maintain the stored information	computer memory that can store information even there is no constant power
Holds data temporary	Holds data permanently
Faster	Slower

5) Distinguish among system software, application software and open source software on the bases of their features?

System Software.

Type of computer program that is designed to run a computer's hardware and application programs

Features

=> High speed
=> Hard to manipulate
=> low-level computer language
=> versatile

Application software

computer Software developed specifically to aid a user to perform any specific tasks.

Features

=> Easy to Design

=> Bigger in Size

=> written in a high-level programming language

open Source Software

code that is designed to be publically accessible

Features

=> Integrity

=> Innovation

=> Final Thoughts

=> Freedom

Q) What is the meaning of computer generation? How many computer generations are defined? what technologies are used?

Generation in computer terminology is a change in technology a computer was being used.

=> First Generation computer - 1942 - 1955

=> Second Generation computer - 1955 - 1964

=> Third Generation computer - 1964 - 1975

=> Fourth Generation computer - 1975 - 1980

=> Fifth Generation computers (present and Beyond)

Technologies:

1942 - 1955 First generation vacum tubes.

1955 - 1964 Second generation transistors

1964 - 1975 Third generation Integrated circuits

1975 - 1980 Fourth generation microprocessors.

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6) b) To change the font style:

To Select all text in a word document, press Ctrl+A. open the Font dialog box & Select the font Style

To change the font size

To Select all text in a word document, press Ctrl+A open the Font dialog box & Select the font size

To change the font color.

Select the text that you want to change. on the Home tab, in the Font group, choose the arrow next to Font

color, and then Select a color.

To highlight (in yellow) the line that reads "need to get IMS's address"

To highlight a single line, move your cursor to the Start of the line you want to highlight. Hold down a Shift key on your keyboard with the Shift key held down, press the End key on your keyboard. A single line is highlighted.

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5) a) To modify column width of a worksheet

Select a column or a range of columns on the Home tab. Select Format > column width. Type the column width and Select Ok

To modify the row height of a worksheet

To change the height of one row, drag the lower boundary of the row heading until the row is Set to the desired height.

To delete rows and columns of a worksheet

To delete one cell, choose Shift cells left or Shift cells up.

To delete the row, click Delete entire row. To delete the column, click Delete entire column.

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b) Absolute reference and relative reference in formula.

=> original cell reference when you copy it, you "lock" it by putting a dollar sign ($) before the cell and column reference

EX: copy the formula =A2 + B2 from C2 to D2

=> Relative cell references are basic cell reference that adjust and change when copied or when using Autofill. Eg: =SUM(B5:B8) changes to =SUM(C5:C8) when copied across to the next cell.

cell address

Use the ADDRESS function to obtain the address of a cell in a worksheet, given specified row and column numbers.

Ex: ADDRESS (2,3) returns C2

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14) a) what tools are available to customize our power point presentation.

=> The home tab holds the cut and paste features Font and paragraph options, and what you need to add the organize Slides.

=> Design

=> Transitions

=> Animation

=> Sound

=> Slide Show

=> Review

=> View

b) write the steps for the following action of power point presentation ?

open a Blank presentation

=> open a power point

=> In the left pane, select new

=> To create a presentation from Scratch, Select Blank presentation. To use a prepared design Select one of the templates.

Save the presentation as lab1.pptx:

Click File > Save. pick or browse to a folder. type a name for your presentation (eg: lab1.pptx) and click Save.

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

Go to the "Home" tab and click "layout" then "Title only". then place your cursor in the "click to add title" box on the Slide and type a title name : Dharalakshmi Srinivasan ... Srinivasa college mamallapuram.

Type your first name and last name in the Subtitle Section

You can type the title of your presentation and a on the Slide and click and type a Subtitle in the "click to add Subtitle" area first name Gopika and last name

Inserting Excel sheet.

=> In power point, on the insert tab, click or tab object

=> In the insert object dialog box, select create from file.

=> Click or tap browse, and in the browse box, find the excel workbook with the data you want to insert and link to.

Clip art and text

=> click the insert tab

=> In illustrations group click on the picture button

=> Insert picture dialogue box appears.

=> with a click select the desired picture

=> Click insert, the picture will be added to the slide.

=> Click and drag the picture to move it to desired location

Slide show effects

=> Select the object or text you want to animate.

=> Select animation and choose an animation

=> Select effect options and choose an effect.

9) 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 on it.

Select the text your want to convert
Select the Insert tab
click on table command A dialog box appears
click on convert text to table, a new dialog box appears
here set number of columns
click on ok finally selected text convert in a table

↓

Select the text you want to convert	Select the Insert tab
click on table command A dialog box appears	Click on convert text to table, a new dialog box appears
here set number of columns	click on ok finally selected text convert in a table

=> Select the text that you want to convert, and then click insert > Table > convert text to table. In the convert text to Table box, choose the options you want. under Table Size, make sure the numbers match the numbers of columns and rows you want.

10) Create a file in MS-word to insert a table in the document. Describe all steps involved in it?

=> place your insertion point in the document where you want the table to appear.

=> Select the Insert tab

=> click the table command.

=> Drag your mouse over the diagram squares to select the number of columns and rows in the table.

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11) Create a following worksheet in MS-excel and save it with name 'book1'.

A	B	C
Roll No	Name	Marks
1	n1	60
2	n2	76
3	n3	80
4	n4	90
5	n5	40
6	n6	50
7	n7	77
8	n8	44
9	n9	85
10	n10	55

=> Click File > Save AS

=> under Save AS, pick the place where you want to save your workbook.

=> Click Browse to find the location you want in your document folder.

=> In the file name box, and Save name 'book1' in excel sheet.

=> click Save.

---

12) calculate the following things of a range (C2:C11) of data in the worksheet created in question no 10.

A	B	C
Reg No	Name	Marks
1	n1	60
2	n2	70
3	n3	80
4	n4	90
5	n5	40
6	n6	50
7	n7	77
8	n8	44
9	n9	88
10	n10	55

The Sum of the marks using AutoSum in a range of cells (C2:C11)

654

The average of the marks in a range of cells (C2:C11)

65.4

Highest marks in a range of cells (C2:C11)

=90

Minimum marks in a range of cells (C2:C11)

=40

7) 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 application software, which is capable of

=> creating
=> editing
=> saving and
=> printing any type of document

opening MS word

=> click the start icon
=> then point to All programs
=> then click microsoft office and
=> then click microsoft word

Creating

⇒ open word

⇒ In the Search for online templates box, enter a Search word like letter, resume, .

⇒ Click a template to see a preview

⇒ Select create

Editing

In the upper-right corner, Select Edit Document > Edit.

Saving

click File > Save, pic or browse to a folder, type a name for your document in the File name box, and click Save.

Printing any type of document

⇒ Select File > print.

⇒ To preview each page, Select the forward and backward arrows at the bottom of the page.

⇒ If the text is too small to read, use the zoom Slider at the bottom of the page to enlarge it

=> choose the number of copies, and any other options you want, and select the print button.

8) create a file in MS-word for the following document and save it with file name 'equations' describe all steps involved in it.

Equations

$X_2 + Y_5 = 30$

$z^3 + a^4 = 50$

$A_2 + B^8 = X_2 + Y_8$

Select Insert > equation or press Alt + = . To use a built-in formula, select Design > equation.

=> click File > save, pick or browse to a folder, type a file name 'equations' in the file name box, and click Save.

Part-2

17) Different data types of C programming language.

The data type in C defines the amount of storage allocated to variables, the values that they can accept and the operation that can be performed on those variables

C is rich in data types

There are three classes of data-type

=> primary data type
=> derived data type
=> user defined data type

Different data types in C language

=> Floating-point
=> Integer
=> Double
=> Character

Floating point

A datatype which is used to represent the floating point numbers.

Integer.

It is represented by the 'int' keyword, and it can be both signed or unsigned

pocable.

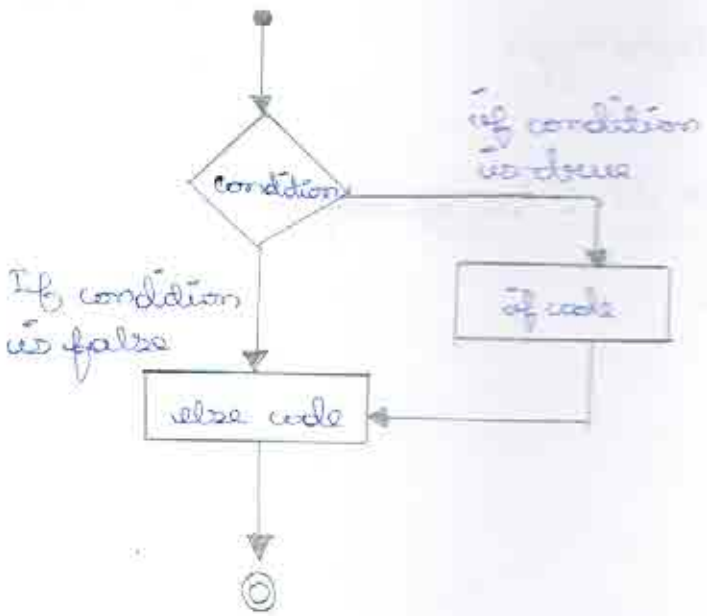
It helps in storing high-precision sorts of floating-point numbers or data in the computer memory.

Character.

two types one is signed data type and second one is unsigned data type. both data type occupy only one byte of memory

19) describe the syntax of the following expressions

a) If-else statement



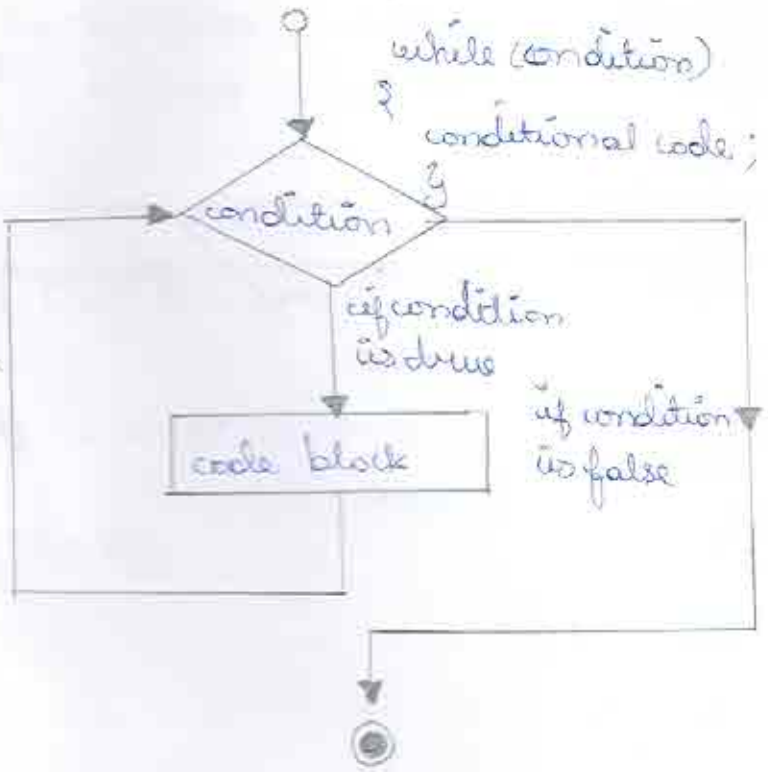
If the Boolean expression evaluates to true, then the if block will be executed, otherwise, the else block will be executed

b) for loop

```
for (expression1; expression2; expression3)
{
  Single Statement
  or
  Block of Statement
}
```

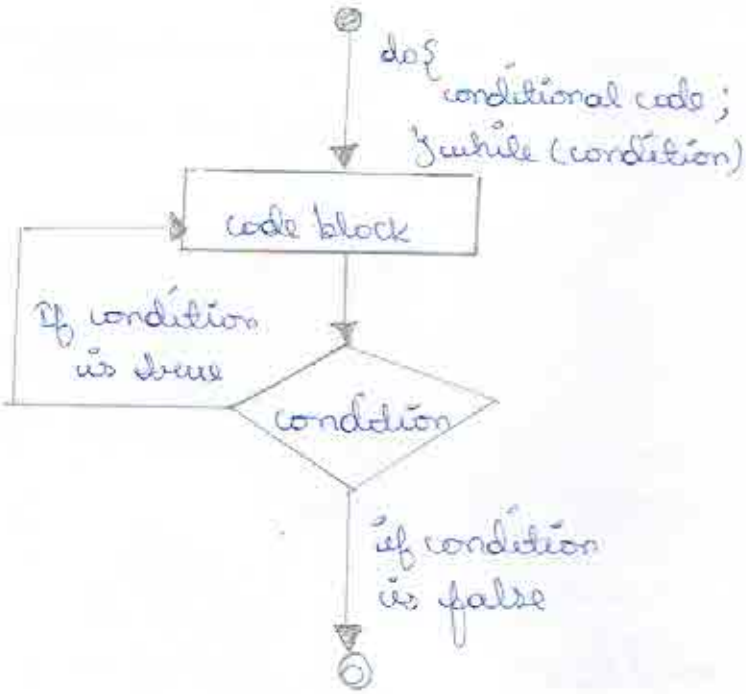
c) while loop

```
while (expression)
{
  Single Statement
  or
  Block of Statement
}
```



d) do-while loop.

```
do
{
  Single Statement
  or
  Block of Statements;
}while (expression);
```



16) what is the difference between machine language and High level language?

Machine language	High level language
A computer programming language consisting of binary Instructions which a computer can respond to directly.	A high-level is a programming language that enables development of a program in a much more user-friendly programming context.
machine language is a collection of binary digits or bits that the computer reads.	High level languages are grouped in two categories based on execution model compiled or Interpreted languages.
Ex: 01001000, 01100101, 01101100, 01101100.	Ex: C, C++, Java

18) Find the output of the following expression.

a) X= 20/5*2+30-5

X= 33

b) Y=30-(40/10+6)+10

=

Y= -10

c) Z=40*2/10-2+10

Z=16

---

20) Find the output of the following program segments.

a)
```
#include <stdio.h>
int main()
{
int i;
for (i=1; i<2; i++)
{
printf ("IMS Ghaziabad\n");
}
}
```

output:

IMS Ghaziabad

b) #include <stdio.h>
int main()
{
int i=1;
while (i <=2)
{
printf ("IMS Ghaziabad\n");
i=i+1;
}
}

output:

IMS Ghaziabad
IMS Ghaziabad

c) #include <stdio.h>
void main()
{
int a =10 , b=100;
if (a>b)
printf("Largest number is %d\n",a);
else
printf (" Largest number is%d\n", b);
}

output:

Largest number is 100