

CCA -101 : Fundamentals of IT & programming

Assignment - 1

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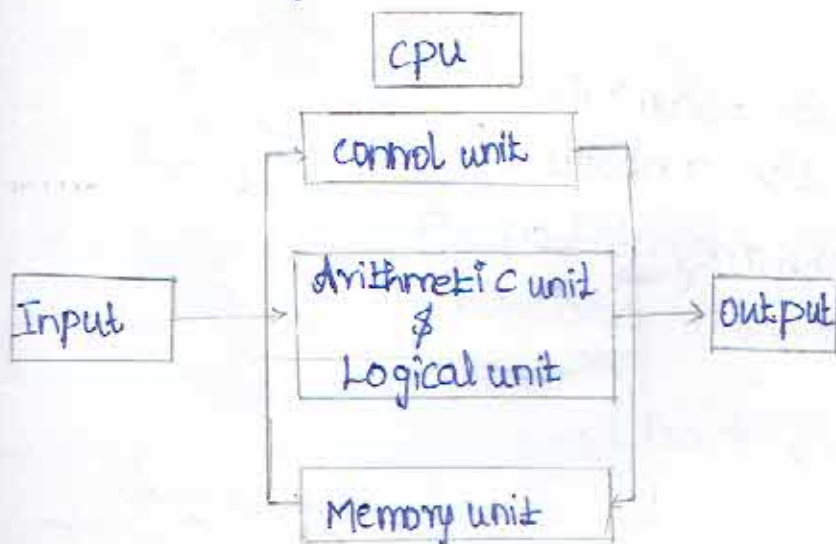
Date : 15/02/2023

CCA : Assignment - 1

CCA-101: Fundamentals of IT programming
Assignment-I

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 classification of the computer by size:

- * Super computer
- * main frame computer
- * mini computer
- * micro computer

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

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

* First Generation computer - 1942 - 1955

* Second Generation Computer - 1955 - 1964

* Third Generation computer - 1964 - 1975

* Fourth Generation computer - 1975 - 1980

* Fifth Generation computer - (present and beyond).

Technologies:

1942 - 1955 First generation vacuum tubes

1955 - 1964 Second generation Transistor

1964 - 1975 Third generation Integrated circuits

1975 - 1980 Fourth generation microprocessors

A) 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 in information even there is no constant power.
Holds data temporary	Holds data permanently
Faster	Slower

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

~~Def~~ System software.

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

Features:

* High speed

* Hard 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 publicly accessible

Features.

Integrity

Innovation

Original Thoughts

Freedom

6) b) To change the font style:

To select all text in a word document, press **CTRL+R**
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 style.

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 & single line is highlighted.

7) Create a file in MS-Word for the following document
and save it with file name 'ims-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 and 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 whole 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 of 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

$$x^2 + y^5 = 30$$

$$z^3 + a^4 = 50$$

$$A^2 + B^7 = x^2 + y^3$$

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 'equation' in the file name box and click save.

Q) create a file in ms-word the convert existing highlight text to table as shown below and save it as file name text-to-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 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.

10 create a file in ms-word to insert a table in the document

Describe all steps involved in the

* 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.

11) create a following worksheet in ms-excel and save with name book1.

A	B	C
Roll No	Name	Marks
1	n ₁	60
2	n ₂	70
3	n ₃	80
4	n ₄	90
5	n ₅	40
6	n ₆	50
7	n ₇	77
8	n ₈	44
9	n ₉	88
10	n ₁₀	55

* click file > save AS

* under save as, pick the place where you want to save your work book

* click browse to find the location you are in your document folder

* In the file name box, and save name 'book1' in excel sheet

* click save.

b) calculate the following things of a range (C2:C11) of data in the work sheet 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	20
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 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

13) 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 a row, drag the lower boundary of the row heading until the row is set to the desired height.

To delete row and column of a worksheet.

To delete one cell, choose shift + del or shift + delete up
To delete the row click delete entire row. To delete
the column, click delete entire column.

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 = \$A\$2 + \$B\$3 from C2 to P2.

* Relative cell reference are basic cell reference that adjust and
change when change copied when using auto. Ex:
SUM(B5:B) changes to SUM(C5:C) 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 \$C\$2.

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 and click to add title box on the slide and type a title name Dhanalakshmi Srinivasan Arts and Science college mamallapuram.

Type your first name and last name in the subtitle section:

• you can type the title of your presentation and a subtitle in the "click to add subtitle" are first name suvetha and last name suvetha .v in subtitle section .

15) write steps for the creation of a set of power point slides that demonstrates your.

Title slide & Bullet List:-

To add a slide title to an existing slide go to the "Home" tab and click "layout" then "Title only" then place your in the "click to add title".

on the HOME tab, in the paragraph click the bullet icon and add bullets to your power point slide to start a numbered list. type 1, a period (.), a space and some text.

Inserting excel sheet

* In power point on the insert tab, click on tab object

* In the insert object dialog box, select create file

* click on tab browse, and in the browse box, find the excel work book 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 animation

- * select animation and choose an animation

- * select effect options and choose an effect.

b) 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 language.
Ex: 01001000, 01100101 01101100, 01101100	Ex: C, C++, Java

part-2

7) 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 data type which is used to represent the floating

point number

Integer

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

Double.

It helps in storing high-precision sets of floating-point number 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.

18) Find the output of the following expression

a) $x = 20/5 * 2 + 30 - 5$

$x = 83$

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

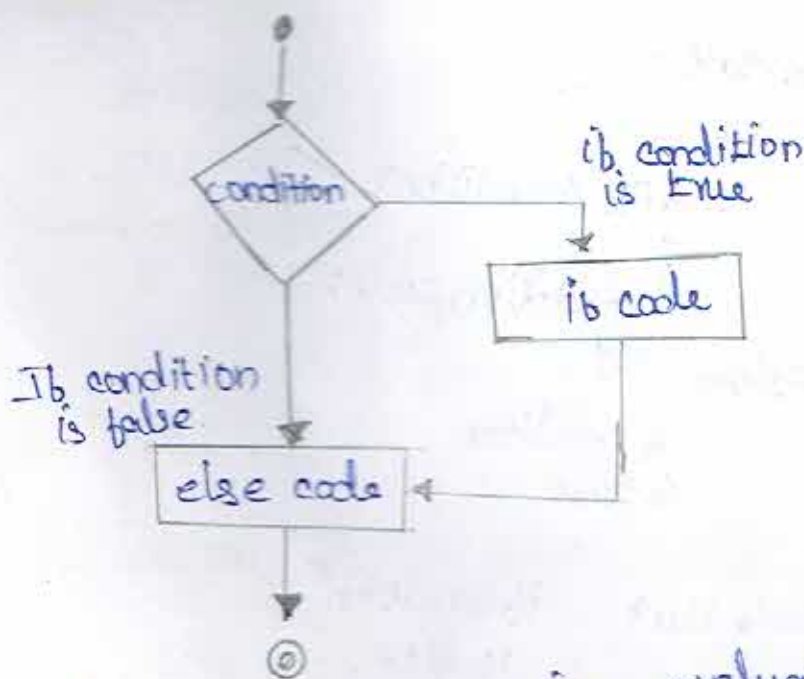
$y = 10$

c) $z = 40 * 2/10 - 2 + 10$

$z = 16$

19) Describe the syntax of the following expression

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 (expression 1; expression 2; expression 3)
```

```
{
```

```
  single statement
```

```
  or
```

```
  block of statement
```

```
}
```

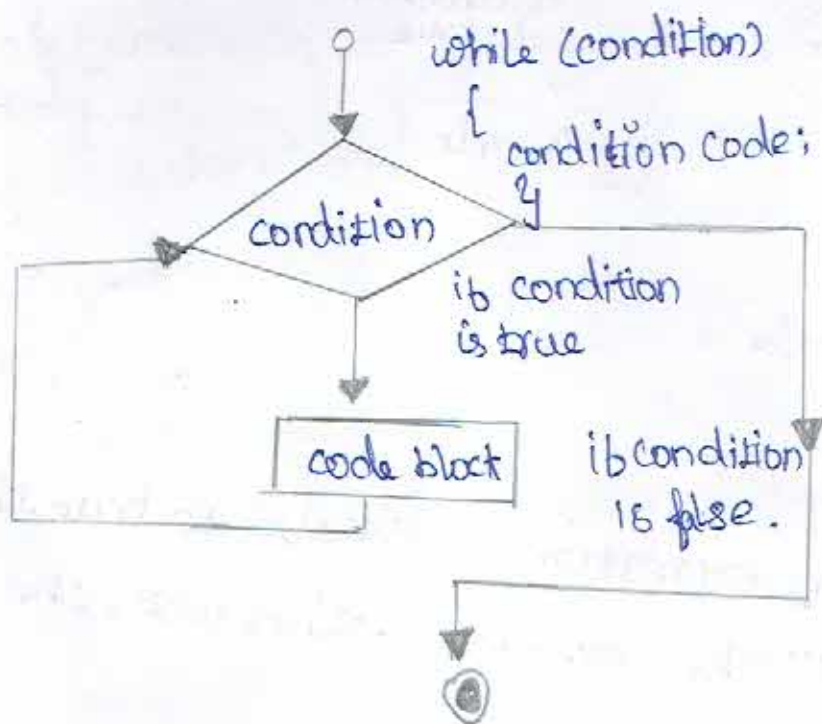
c) while loop.

```
while (expression)
```

```
  single statement
```

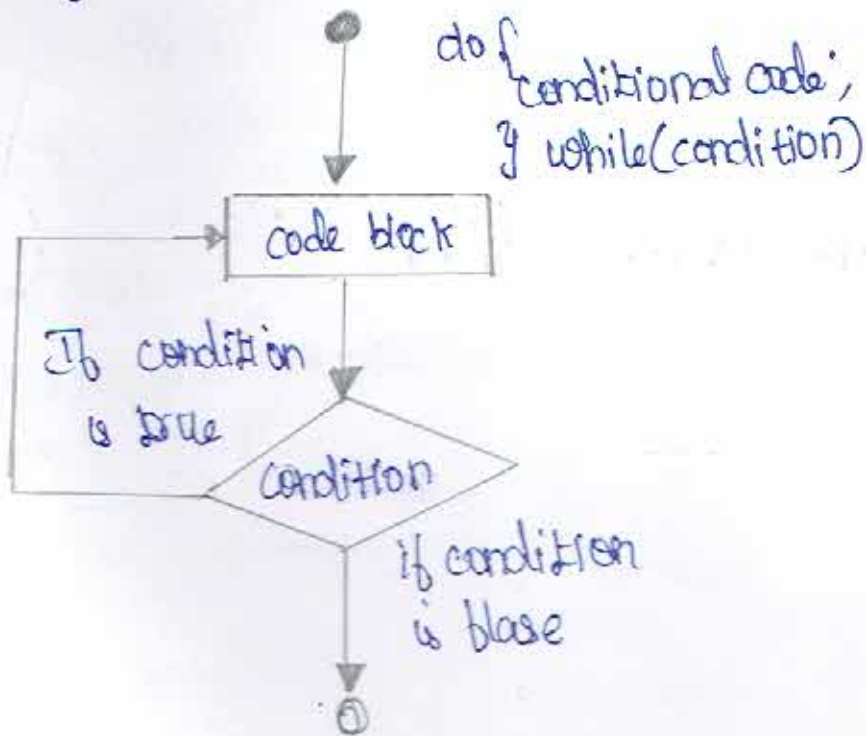
```
  or
```

```
  block statement.
```



d) do-while loop

```
do  
{  
  single statement  
  or  
  block of statement ;  
} while (expression);
```



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");  
  }
```


g
g

out put

IMS Ghaziabad

by # include <stdio.h>

int main()

{

int i=1;

while(i <= 2)

{

printf ("IMS Ghaziabad\n");

i = i+1

}

}

out put

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.