13th December, 2021

PROBLEM SOLVING & PROGRAMMING IN C



COURSE : BCA

SEMESTER : 1ST

SECTION : ‘B’

GROUP : ‘B’

***Structure of C Program***

# Documentation Section

This section includes comment lines (Single line comment and multiple line comment)

E.g., //TEXT Single Line Comment

 /\*........

 ............

 ............\*/Multiple Line Comment

# Link Section

This section is used to add header files like predefined function etc.

E.g. - #include<stdio.h>

# Definition Section

It includes symbolic constant definition

E.g. - #define MAX 40

# Global declaration Section

This section is used to define variables globally.

# Main () Function

Main Function involves the body of the program.

E.g., - main()

 {

 declaration part;

 executable part;

 }

# Subprogram Section

This section includes the definition of various functions.

## Pre-Processor

Pre-processors are used on links first, then program gets compiled. A program is getting operated by preprocessor directives. Source code examination is done by pre-processor directives which actually gives the directions to process the program.

## #include<stdio.h>

This statement tells compiler to include stdio file in the programme that will enable common input and output functions such as scanf(), printf().

## return 0

For the successful execution of main function which returns an integer value.

## variable Initialization

syntax: Data\_type Variable\_Name;

E.g., - int number;

### **Practical session….**

Q1. WAP to display your name.

Sol. #include <stdio.h>

 int main()

 {

 printf("NAME");//message to display over screen

 return 0;

 }

Q2. WAP to display your name and roll number in different lines.

Sol. #include <stdio.h>

 int main()

 {

 printf("NAME");

 printf("\n ROLL NO");

 return 0;

 }

Q3. WAP to display your 3 hobbies in different lines.

Sol. #include<stdio.h>

 int main()

 {

 printf("Hobbie 1 \nHobbie 2 \nHobbie 3");

 return 0;

 }

 OR

 #include <stdio.h>

 int main()

 {

 printf("Hobbie 1");

 printf("\nHobbie 2");

 printf("\nHobbie 3");

 return 0;

 }

Q4. WAP to display the integer number entered by user.

Sol. #include<stdio.h>

 int main()

 {

 int number;//Variable Initialized

 printf("ENTER AN INTEGER");//Message for the User

scanf("%d",&number);//This function reads the integer value and store in variable number

 printf("The number entered by User is:%d",number);

 return 0;

 }

### **Boost your brain**

Q1. WAP to display 3 integer numbers entered by user in different lines.

Sol. #include<stdio.h>

 int main()

 {

 int number;//Variable Initialized

 printf(“ENTER FIRST INTEGER);//Message for the User

 printf(‘’ENTER SECOND INTEGER’); //Message for the User

 printf(“ENTER THIRD INTEGER”); //Message for the User

 scanf(“%d”,&number);//This function reads the integer value and store

 in variable number

 printf(“The number entered by the User is :%d”,number);

 return 0;

 }