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;

}