21. Execute a program to display Arithmetic operations using

Function without argument and with return value

#include<stdio.h>

// function declarations

int add();

int subtract();

int multiply();

int divide();

// main function

int main()

{

int a,s,m,d;

a=add();

s=subtract();

m=multiply();

d=divide();

printf("Addition of 2 numbers = %d",a);

printf("substraction of 2 numbers = %d",s);

printf("multiplication of 2 numbers = %d",m);

printf("division of 2 numbers = %d",d);

return 0;

}

// function for addition of two numbers

int add()

{

int n1,n2,result;

printf("Enter numbers: ");

scanf("%d %d",&n1,&n2);

result = n1 + n2;

return result;

}

// function for subtraction of two numbers

int subtract()

{

int n1,n2,result;

printf("Enter numbers: ");

scanf("%d %d",&n1,&n2);

result = n1 - n2;

return result;

}

// function for multiplication of two numbers

int multiply()

{

int n1,n2,result;

printf("Enter numbers: ");

scanf("%d %d",&n1,&n2);

result = n1 \* n2;

return result;

}

// function for division of two numbers

int divide()

{

int n1,n2,result;

printf("Enter numbers: ");

scanf("%d %d",&n1,&n2);

result = n1 / n2;

return result;

}

22.Execute a program to display Arithmetic operations using

Function with argument and without return value

#include<stdio.h>

// function declarations

void add(int n1, int n2);

void subtract(int n1, int n2);

void multiply(int n1, int n2);

void divide(int n1, int n2);

// main function

int main()

{

int n1, n2;

printf("Enter numbers: ");

scanf("%d %d",&n1,&n2);

add(n1, n2);

subtract(n1, n2);

multiply(n1, n2);

divide(n1, n2);

return 0;

}

// function for addition of two numbers

void add(int n1, int n2)

{

int result;

result = n1 + n2;

printf("%d + %d = %d\n", n1, n2, result);}

// function for subtraction of two numbers

void subtract(int n1, int n2)

{

int result;

result = n1 - n2;

printf("%d - %d = %d\n", n1, n2, result);}

// function for multiplication of two numbers

void multiply(int n1, int n2)

{

int result;

result = n1 \* n2;

printf("%d \* %d = %d\n", n1, n2, result);}

// function for division of two numbers

void divide(int n1, int n2)

{

int result;

result = n1 / n2;

printf("%d / %d = %d\n", n1, n2, result);}

Output:-

# Execute program to display factorial of given number using functions

#include<stdio.h> #include<math.h> int main()

{

printf("Enter a Number to Find Factorial: ");

printf("\nFactorial of a Given Number is: %d ",fact());

return 0;

}

int fact()

{

int i,fact=1,n; scanf("%d",&n); for(i=1; i<=n; i++)

{

fact=fact\*i;

}

return fact;

}

1. **Execute program to display Fibonacci series with using recursive**

#include<stdio.h> int Fibonacci(int); int main()

{

intn,i =0,c; scanf("%d",&n);

printf("Fibonacci seriesn");

for(c =1;c <=n ;c++)

{

printf("%d n",Fibonacci(i)); i++;

}

return0;

}

intFibonacci(intn)

{

if(n ==0) return0; elseif(n ==1) return1;

else

return(Fibonacci(n-1)+Fibonacci(n-2));

}

# Execute a program to display Fibonacci series without using Recursive

#include<stdio.h> int main()

{

int n1=0,n2=1,n3,i,number;

printf("Enter the number of elements:");

scanf("%d",&number);

printf("n %d %d",n1,n2);

for(i=2;i<number;++i)

{

n3=n1+n2;

printf(" %d",n3);

n1=n2;

n2=n3;

}

return 0;

}

# Execute a program to display Arithmetic operations by using pointers

#include<stdio.h> int main(){

int number=50;

int \*p;

p=&number;//stores the address of number variable printf("Address of p variable is %u n",p);

p=p+1;

printf("After increment: Address of p variable is %u n",p);

return 0;

}

## **27. Execute a program to display data of one student using**

#include <stdio.h>

struct student {

char firstName[50];

int roll;

float marks;

} s[5];

int main() {

int i;

printf("Enter information of students:n");

// storing information

for (i = 0; i < 5; ++i) {

s[i].roll = i + 1;

printf("\nFor roll number%d,n", s[i].roll);

printf("Enter first name: ");

scanf("%s", s[i].firstName);

printf("Enter marks: ");

scanf("%f", &s[i].marks);

}

printf("Displaying Information:n n");

// displaying information

for (i = 0; i < 5; ++i) {

printf("nRoll number: %dn", i + 1);

printf("First name: ");

puts(s[i].firstName);

printf("Marks: %.1f", s[i].marks);

printf("n");

}

return 0;

}