//WAP to perform add and sub using function pointer

/* Algorithm:

1.read 2 integer variable and 1 char to select particular operaion

2.using switch case perform particular operation and return address of result to main

3.by dereferencing the address received print the result.*/

```
#include<stdio.h>     //include standard input and output header file using preprocessor directive
int result;                                                    //declare a global variable to store result
int* sum(int *n1,int *n2)
                //define sum() with pointer variables as arguments and return type as pointer variable
{
   result=(*n1+*n2);
   return (&result);
}
int* sub(int *n1,int *n2)
                 //define sub() with pointer variables as arguments and return type as pointer variable
{
   result=(*n1-*n2);
   return (&result);
}
int main()
{
   int num1,num2;                                                    //declare two integer variables
   int *result;                                                        //declare a pointer variable
   printf("Enter numbers to perform addition/subtraction:\n");
   scanf("%d %d",&num1,&num2); //input numbers
   printf("Enter '+' for Addition and '-' for subtraction:\n");
   char operation;                                                 //declare a char to select operation
   scanf(" %c",&operation);                                                    //input the key
```

```
    switch(operation)
    {
        case '+':
        {
            result=sum(&num1,&num2);       //call sum() with addresses of 2 variables as arguments
            printf("Addition of %d and %d is %d\n",num1,num2,*result);
                                        //print the result by dereferencing the pointer returned by sum()
            break;
        }
        case '-':
        {
            result=sub(&num1,&num2);        //call sub() with addresses of 2 variables as arguments
            printf("Subtraction of %d and %d is %d\n",num1,num2,*result);
                                         //print the result by dereferencing the pointer returned by sub()
            break;
        }
        default:
        printf("Invalid Attempt");              //print the  default statement in case of invalid operation
    }
}
```