Calculator example using C code

#include<stdio.h>

#include<conio.h>

#include<math.h>

#include<stdlib.h>

#define KEY "Enter the calculator Operation you want to do:"

void addition();

void subtraction();

void multiplication();

void division();

void modulus();

void power();

int factorial();

void calculator\_operations();

int main()

{

    int X=1;

    char Calc\_oprn;

    calculator\_operations();

    while(X)

    {

        printf("\n");

        printf("%s : ", KEY);

        Calc\_oprn=getche();

        switch(Calc\_oprn)

        {

            case '+': addition();

                      break;

            case '-': subtraction();

                      break;

            case '\*': multiplication();

                      break;

            case '/': division();

                      break;

            case '?': modulus();

                      break;

            case '!': factorial();

                      break;

            case '^': power();

                      break;

            case 'H':

            case 'h': calculator\_operations();

                      break;

            default : system("cls");

    printf("\n\*\*\*\*\*\*\*\*\*\*You have entered unavailable option");

    printf("\*\*\*\*\*\*\*\*\*\*\*\n");

    printf("\n\*\*\*\*\*Please Enter any one of below available ");

    printf("options\*\*\*\*\n");

                      calculator\_operations();

        }

    }

}

void calculator\_operations()

{

    printf("\n             Welcome to C calculator \n\n");

    printf(" display available option \n\n");

    printf("Enter + symbol for Addition \n");

    printf("Enter - symbol for Subtraction \n");

    printf("Enter \* symbol for Multiplication \n");

    printf("Enter / symbol for Division \n");

    printf("Enter ? symbol for Modulus\n");

    printf("Enter ^ symbol for Power \n");

    printf("Enter ! symbol for Factorial \n\n");

}

void addition()

{

    int n, total=0, k=0, number;

    printf("\nEnter the number of elements you want to add:");

    scanf("%d",&n);

    printf("Please enter %d numbers one by one: \n",n);

    while(k<n)

    {

        scanf("%d",&number);

        total=total+number;

        k=k+1;

    }

    printf("Sum of %d numbers = %d \n",n,total);

}

void subtraction()

{

    int a, b, c = 0;

    printf("\nPlease enter first number  : ");

    scanf("%d", &a);

    printf("Please enter second number : ");

    scanf("%d", &b);

    c = a - b;

    printf("\n%d - %d = %d\n", a, b, c);

}

void multiplication()

{

    int a, b, mul=0;

    printf("\nPlease enter first numb   : ");

    scanf("%d", &a);

    printf("Please enter second number: ");

    scanf("%d", &b);

    mul=a\*b;

    printf("\nMultiplication of entered numbers = %d\n",mul);

}

void division()

{

    int a, b, d=0;

    printf("\nPlease enter first number  : ");

    scanf("%d", &a);

    printf("Please enter second number : ");

    scanf("%d", &b);

    d=a/b;

    printf("\nDivision of entered numbers=%d\n",d);

}

void modulus()

{

    int a, b, d=0;

    printf("\nPlease enter first number   : ");

    scanf("%d", &a);

    printf("Please enter second number  : ");

    scanf("%d", &b);

    d=a%b;

    printf("\nModulus of entered numbers = %d\n",d);

}

void power()

{

    double a,num, p;

    printf("\nEnter two numbers to find the power \n");

    printf("number: ");

    scanf("%lf",&a);

    printf("power : ");

    scanf("%lf",&num);

    p=pow(a,num);

    printf("\n%lf to the power %lf = %lf \n",a,num,p);

}

int factorial()

{

    int i,fact=1,num;

    printf("\nEnter a number to find factorial : ");

    scanf("%d",&num);

    if (num<0)

    {

        printf("\nPlease enter a positive number to");

        printf(" find factorial and try again. \n");

        printf("\nFactorial can't be found for negative");

        printf(" values. It can be only positive or 0  \n");

        return 1;

    }

    for(i=1;i<=num;i++)

    fact=fact\*i;

    printf("\n");

    printf("Factorial of entered number %d is:%d\n",num,fact);

    return 0;

}