Assignment 3

Simple Calculator

#include <stdio.h>

#include <math.h>

int main() {

int choice;

float num1,num2,result;

printf("Calculator\n");

printf("1. Addition\n");

printf("2. Subtraction\n");

printf("3. Multiplication\n");

printf("4. Division\n");

printf("5. Logarithmic value\n");

printf("6. Square root\n");

printf("7. Exit\n");

printf("Enter your choice: ");

scanf("%d", &choice);

switch(choice){

case 1:

printf("Enter two no. = ");

scanf("%f %f",&num1,&num2);

result=num1+num2;

printf("Addition of two no is = %f",result);

break;

case 2:

printf("Enter two no. = ");

scanf("%f %f",&num1,&num2);

result=num1-num2;

printf("Subtraction of two no is = %f",result);

break;

case 3:

printf("Enter two no. = ");

scanf("%f %f",&num1,&num2);

result=num1\*num2;

printf("Multiplication of two no is = %f",result);

break;

case 4:

printf("Enter two no. = ");

scanf("%f %f",&num1,&num2);

if (num2 != 0) {

result = num1 / num2;

printf("Division of two no is = %f",result);

} else {

printf("Error: Division by zero is not allowed.\n");

}

break;

case 5:

printf("Enter no. = ");

scanf("%f",&num1);

if (num1 > 0) {

result = log(num1);

printf("Logarithmic value = %f\n", result);

} else {

printf("Error: Logarithm of non-positive numbers is undefined.\n");

}

break;

case 6:

printf("Enter no. = ");

scanf("%f",&num1);

if (num1 >= 0) {

result = sqrt(num1);

printf("Sqaure root = %f\n", result);

} else {

printf("Error: Square root of negative numbers is not defined in real numbers.\n");

}

break;

case 7:

printf("Exiting the calculator");

break;

default:

printf("Invalid choice. try again.\n");

break;

}

return 0;

}