# ASSIGNMENT 3[{FOCP}

## Simple calculator

A simple calculator is a basic tool or program designed to perform fundamental arithmetic operations

#include <stdio.h>

#include <math.h>

int main() {

int choice;

double num1, num2, result;

printf("Simple Calculator\n");

printf("Available Choices:\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("\nType any number from above: ");

scanf("%d", &choice);

switch (choice) {

case 1:

printf("Enter two numbers: ");

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

result = num1 + num2;

printf("Result: %.2lf\n", result);

break;

case 2:

printf("Enter two numbers: ");

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

result = num1 - num2;

printf("Result: %.2lf\n", result);

break;

case 3:

printf("Enter two numbers: ");

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

result = num1 \* num2;

printf("Result: %.2lf\n", result);

break;

case 4:

printf("Enter two numbers: ");

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

if (num2 != 0) {

result = num1 / num2;

printf("Result: %.2lf\n", result);

} else {

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

}

break;

case 5:

printf("Enter a number: ");

scanf("%lf", &num1);

result = log(num1);

printf("Logarithmic value: %.2lf\n", result);

break;

case 6:

printf("Enter a number: ");

scanf("%lf", &num1);

if (num1 >= 0) {

result = sqrt(num1);

printf("Square root: %.2lf\n", result);

} else {

printf("Error: Cannot calculate square root of a negative

number.\n");

}

break;

default:

printf("Invalid choice.\n");

break;

}

return 0;

}