

## Assignment 3 (Simple Calculator)

```
#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;  
}
```