

Assignment 3

Q2. . WAP to make a simple calculator

```
#include<stdio.h>

#include 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:
```

```
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;
```

```
}
```