Activity No: 6.1	
Activity Title: Functions	
Course Code: CPE 007	**Program:** Computer Engineering
Course Title: Programming Logic and Design	**Date Performed: 10/17/25**
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Objectives

This activity aims to develop programming skills using functions.

Instructions

The students should be able to:

2.1 Create a program in C++ that will add, subtract, divide, multiply for a 2 user-input integer values. Use functions in the program.

2.2 Create a program in C++ that will convert a user-input Farenheight to Celcius and vice versa. Use functions in the program.

2.3 Create a program in C++ that will convert dollars into pesos and vice versa. Use functions in the program.

Output/Answer

main.cpp

Share Run

```cpp
#include <iostream>
using namespace std;

int add(int a, int b);
int subtract(int a, int b);
int multiply(int a, int b);
float divide(int a, int b);

int main() {
    int num1, num2;

    cout << "Enter two integers: ";
    cin >> num1 >> num2;

    cout << "Addition: " << add(num1, num2) << endl;
    cout << "Subtraction: " << subtract(num1, num2) << endl;
    cout << "Multiplication: " << multiply(num1, num2) << endl;
    if (num2 != 0) {
        cout << "Division: " << divide(num1, num2) << endl;
    } else {
        cout << "Cannot divide by zero!" << endl;
    }

    return 0;
}

    int add(int a, int b) {
        return a + b;
    }

    int subtract(int a, int b) {
        return a - b;
    }

    int multiply(int a, int b) {
        return a * b;
    }

```

Output

```
Enter two integers: 32
32
Addition: 64
Subtraction: 0
Multiplication: 1024
Division: 1


=== Code Execution Successful ===
```

main.cpp

Share | Run

```cpp
#include <iostream>
using namespace std;

float fahrenheitToCelsius(float fahrenheit);
float celsiusToFahrenheit(float celsius);

int main() {
    float temperature;
    int choice;

    cout << "Choose a conversion type:\n";
    cout << "1. Fahrenheit to Celsius\n";
    cout << "2. Celsius to Fahrenheit\n";
    cout << "Enter your choice (1 or 2): ";
    cin >> choice;

    cout << "Enter the temperature: ";
    cin >> temperature;

    if (choice == 1) {
        cout << "Temperature in Celsius: " << fahrenheitToCelsius(temperature) << "°C" << endl;
    } else if (choice == 2) {
        cout << "Temperature in Fahrenheit: " << celsiusToFahrenheit(temperature) << "°F" << endl;
    } else {
        cout << "Invalid choice!" << endl;
    }

    return 0;
}

float fahrenheitToCelsius(float fahrenheit) {
    return (fahrenheit - 32) * 5 / 9;
}

float celsiusToFahrenheit(float celsius) {
    return (celsius * 9 / 5) + 32;
}
```

Output

```
Choose a conversion type:
1. Fahrenheit to Celsius
2. Celsius to Fahrenheit
Enter your choice (1 or 2): 2
Enter the temperature: 12
Temperature in Fahrenheit: 53.6°F


=== Code Execution Successful ===
```

main.cpp

Share Run

```cpp
#include <iostream>
using namespace std;

float dollarsToPesos(float dollars);
float pesosToDollars(float pesos);

int main() {
    float amount;
    int choice;

    cout << "Choose a conversion type:\n";
    cout << "1. Dollars to Pesos\n";
    cout << "2. Pesos to Dollars\n";
    cout << "Enter your choice (1 or 2): ";
    cin >> choice;

    cout << "Enter the amount: ";
    cin >> amount;

    if (choice == 1) {
        cout << "Amount in Pesos: " << dollarsToPesos(amount) << " MXN" << endl;
    } else if (choice == 2) {
        cout << "Amount in Dollars: " << pesosToDollars(amount) << " USD" << endl;
    } else {
        cout << "Invalid choice!" << endl;
    }

    return 0;
}

float dollarsToPesos(float dollars) {
    return dollars * 18.0; // Example conversion rate: 1 USD = 18 MXN
}

float pesosToDollars(float pesos) {
    return pesos / 18.0; // Example conversion rate: 1 USD = 18 MXN
}
```

Output

```
Choose a conversion type:
1. Dollars to Pesos
2. Pesos to Dollars
Enter your choice (1 or 2): 2
Enter the amount: 12
Amount in Dollars: 0.666667 USD


=== Code Execution Successful ===
```

Supplementary Activity (if any)

Conclusion

Assessment Rubric: SO 7