Activity No. 6.1	
Hands-on Activity 5.1: Hands-on Activity 6.1: Functions	
Course Code: CPE007	Program: Computer Engineering
Course Title: Programming Logic and Design	Date Performed: October 21, 2025
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Name(s): Tobias, Lawrence C.	Instructor: Engr. Jimlord M. Quejado

6. Output

1. CODE :

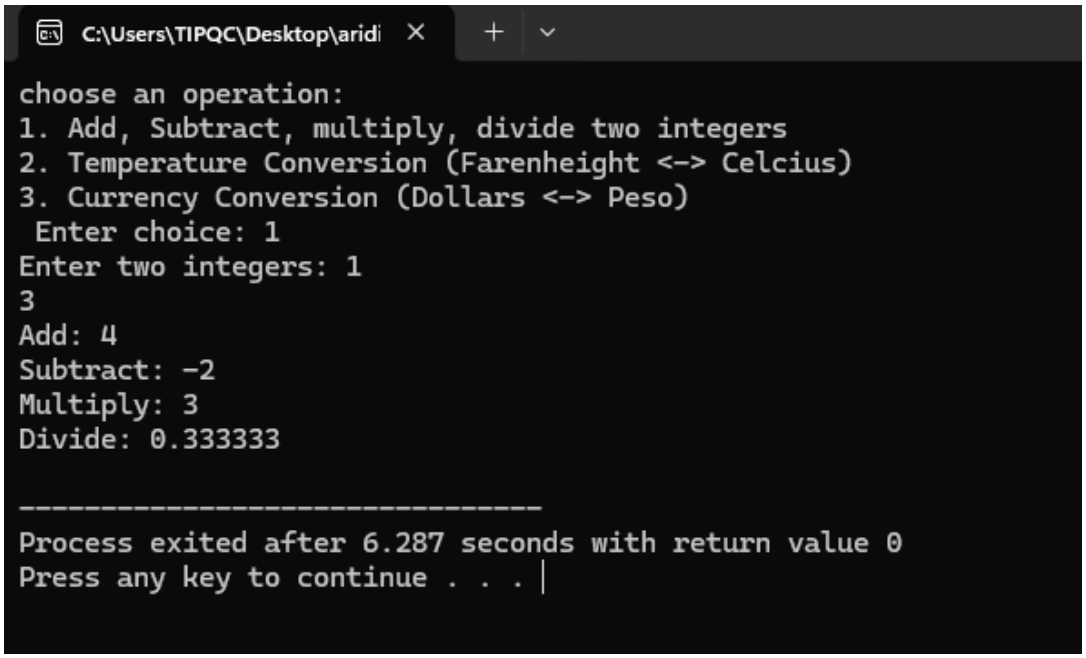
Tobias_CPE11S1_Hands_on_Activity_6_1_Functions.cpp

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

int add(int a, int b);
int subtract(int a, int b);
int multiply(int a, int b);
double divide(int a, int b);
double farenheightToCelsius(double f);
double celsiusToFarenheight(double c);
double dollarsToPeso(double dollars);
double pesoToDollars(double peso);

int main() {
    
    int choice, a, b;
    double temp, amount;

    cout << "choose an operation:\n";
    cout << "1. Add, Subtract, multiply, divide two integers\n";
    cout << "2. Temperature Conversion (Farenheight <-> Celsius)\n";
    cout << "3. Currency Conversion (Dollars <-> Peso)\n";
    cout << " Enter choice: ";
    cin >> choice;

    switch(choice) {
        case 1:
            cout << "Enter two integers: ";
            cin >> a >> b;
            cout << "Add: " << add(a,b) << endl;
            cout << "Subtract: " << subtract(a,b) << endl;
            cout << "Multiply: " << multiply(a,b) << endl;
            cout << "Divide: " << divide(a,b) << endl;
            break;

        case 2:
            cout << "Enter temperature: ";
            cin >> temp;
            cout << "Farenheight to Celsius: " << farenheightToCelsius(temp) << endl;
            cout << "Celsius to Farenheight: " << celsiusToFarenheight(temp) << endl;
            break;

        case 3:
            cout << "Enter amount: ";
            cin >> amount;
            cout << "Dollars to Peso: " << dollarsToPeso(amount) << endl;
            cout << "Peso to Dollars: " << pesoToDollars(amount) << endl;

        default:
            cout << "Invalid choice.\n";
    }
}
```

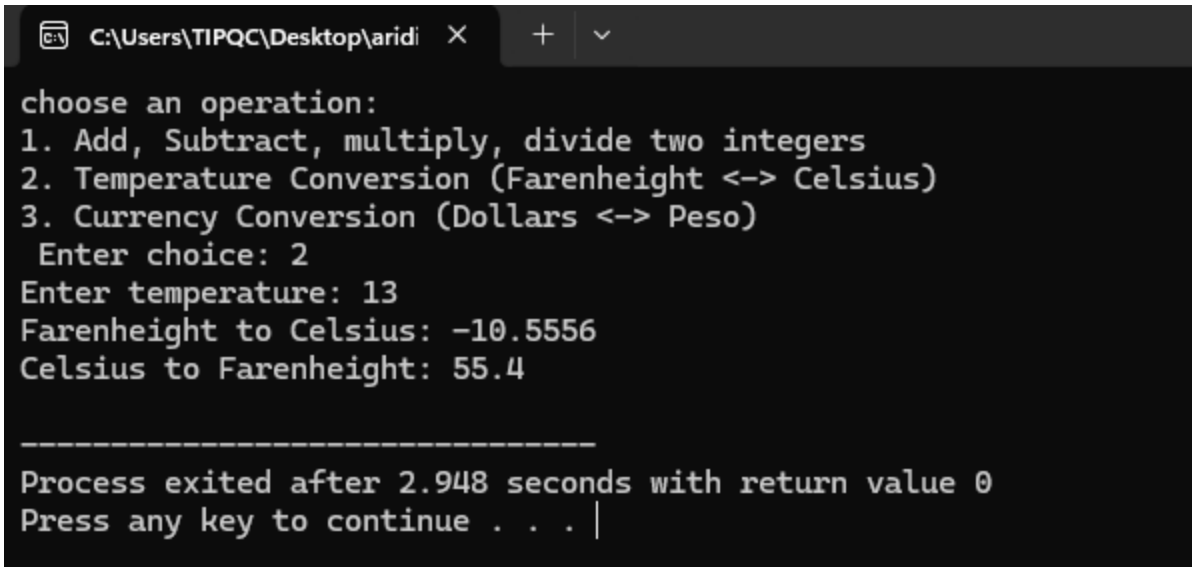
```
int add (int a, int b) {
    return a + b;
}

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

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

double divide (int a, int b) {
    if (b!=0)
        return (double)a / b;
    else {
        cout << "cannot divide by zero :(" << endl;
        return 0;
    }
}

double farenheightToCelsius(double f) {
    return (f - 32) * 5 / 9;
}

double celsiusToFarenheight(double c) {
    return (c * 9 / 5) + 32;
}

double dollarsToPeso(double dollars) {
    return dollars * 56.5;
}

double pesoToDollars(double peso) {
    return peso / 56.5;
}
```

2. OUTPUT:

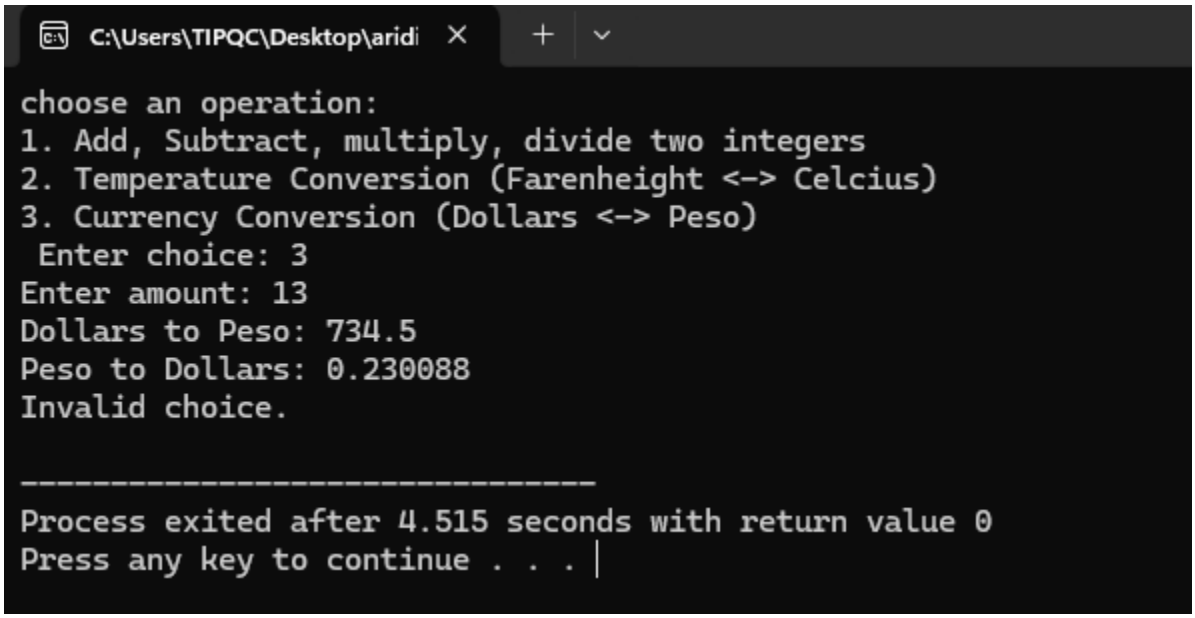
ARITHMETIC



TEMPERATURE CONVERSION



CURRENCY CONVERSION



7. Supplementary Activity

CODE ANALYSIS:

ARITHMETIC

In this part, I made a function that asks the user to enter two numbers. After getting the inputs, I used basic math formulas for addition, subtraction, multiplication, and division. Each answer is shown clearly on the screen after the calculations. I tested it using different numbers to make sure everything works right. The output shows all the math results one by one in a simple and clear way.

TEMPERATURE CONVERSION

For this part, I made a function that changes temperatures between Fahrenheit and Celsius. I used the right formulas for both conversions and displayed the answers using print statements. I tried different values to check if the results were

correct. The program quickly shows the converted temperature after typing a number. It works smoothly and gives the right answers for both conversions.

CURRENCY CONVERSION

In this part, I created a function that converts money from Dollars to Pesos and from Pesos to Dollars. I added a fixed exchange rate and used it to get the converted amount. The program shows both results right after entering the amount. I tested it with different values to see if the math and conversion were correct. The output clearly shows how the conversion changes depending on the number typed.

8. Conclusion

In this activity, I made different functions that each do a specific task. The arithmetic part was about solving basic math problems, the temperature conversion part focused on changing values between Fahrenheit and Celsius, and the currency conversion part converted money between Dollars and Pesos. I made sure each function worked properly by testing them with different numbers and checking if the outputs were correct. At first, I had to fix a few errors and check my formulas, but once everything was running smoothly, it felt really satisfying to see the correct results appear on the screen. Overall, this activity helped me practice organizing my code better and made me realize how functions make a program easier to work with and more useful in real-life situations.