Activity No. 6.1	
Functions	
Course Code: CPE007	**Program:** Computer Engineering
Course Title: Computer Programming Logic and Design	**Date Performed: October 21, 2025**
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6. Output	

Code 1:

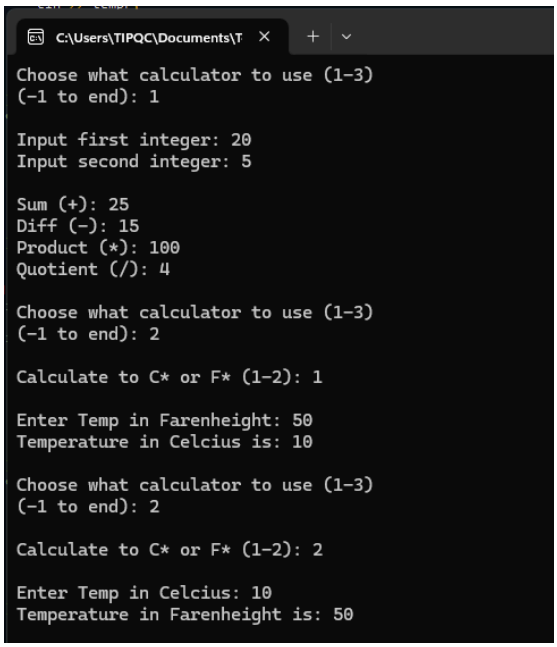
- Screenshot of Code(Readable):

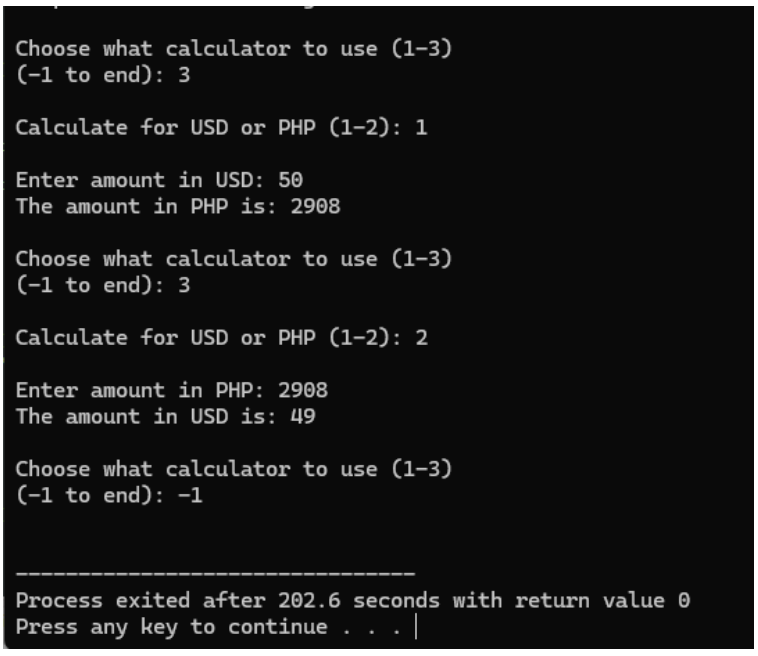
```
#include <iostream>

using namespace std;

void ArithmeticComputation (int a, int b);
void TemperatureConvertion (int a);
void CashConvertion (int a);

int main (){
    int int1, int2, x, n;


    while (true) {

        cout << "Choose what calculator to use (1-3) " << endl;
        cout << "(-1 to end): ";
        cin >> n;
        cout << endl;

        if (n == -1) {
            break;
        }

        if (n != -1) {

        switch(n) {

            case 1:

              cout << "Input first integer: ";
              cin >> int1;
              cout << "Input second integer: ";
              cin >> int2;

              cout << endl;

              ArithmeticComputation(int1, int2);

              break;

            case 2:

              cout << "Calculate to C* or F* (1-2): ";
              cin >> x;
              cout << endl;

              TemperatureConvertion(x);

              break;
```

```
50
51              case 3:
52
53                cout << "Calculate for USD or PHP (1-2): ";
54                cin >> x;
55                cout << endl;
56
57                CashConvertion(x);
58
59                break;
60
61              default:
62                cout << "Error!" << endl;
63                cout << endl;
64                break;
65              }
66          }
67      }
68      return 0;
69  }
70
71  void ArithmeticComputation(int a, int b)     {
72      int sum = a + b;
73      int product = a * b;
74      int diff = a - b;
75      int quotient = a / b;
76
77      cout << "Sum (+): " << sum << endl;
78      cout << "Diff (-): " << diff << endl;
79      cout << "Product (*): " << product << endl;
80      cout << "Quotient (/): " << quotient << endl;
81      cout << endl;
82      }
83
```

```cpp
void TemperatureConvertion(int a) {
    int tempF, tempC;

    if (a < 2) {
        cout << "Enter Temp in Farenheight: ";
        cin >> tempF;

        tempC = (tempF - 32.0) * 5.0 / 9.0;

        cout << "Temperature in Celcius is: " << tempC << endl;
        cout << endl;
    }
    else {
        cout << "Enter Temp in Celcius: ";
        cin >> tempC;

        tempF = (tempC * 1.8) + 32;

        cout << "Temperature in Farenheight is: " << tempF << endl;
        cout << endl;
    }
}

void CashConvertion(int a) {
    int usd, php;

    if (a < 2) {
        cout << "Enter amount in USD: ";
        cin >> usd;

        php = usd * 58.17;

        cout << "The amount in PHP is: " << php << endl;
        cout << endl;
    }
    else{
        cout << "Enter amount in PHP: ";
        cin >> php;

        usd = php / 58.17;

        cout << "The amount in USD is: " << usd << endl;
        cout << endl;
    }
}
```

- Output of Code(label and compile ALL possible outputs):





7. Supplementary Activity

- This code uses 3 separate functions to compute user inputted values. The way this code does this is by first declaring the function definition and then its arguments, afterwards it proceeds to the main function which uses a while loop that allows the program to loop after a computation was made and ends when an input of -1 is detected. Inside the while loop a switch case is used to access the different computations 1 being arithmetic computation, 2 being temperature conversion, and 3 being Cash conversion, After the main loop the definition of all the functions are seen where it shows how the arithmetic computation shows all of the computations of 2 user inputted integers, and how the temperature and cash conversion uses an if-else statement to choose which conversion to compute.

8. Conclusion

- This activity has tested my abilities in using functions for a program, allowing me to make functions that can compute the arithmetic computation of 2 integers, the conversion of temperature to celsius and fahrenheit and vice versa, and the conversion of USD to PHP and vice versa. By using functions it allowed me to create code that is easily accessible if needed. I feel that in this activity I did pretty well as I understood how functions worked and the multiple ways we can use functions to make the code easy to use. This activity also made me realize that I can use it in the final project of this semester.