

Activity No. 1.1	
Basic C++ Programming	
Course Code: CPE010	Program: Computer Engineering
Course Title: Data Structures and Algorithms	Date Performed: 7/29/25
Section: CPE21S4	Date Submitted: 7/29/25
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6. Output

CPE010_HOA1p1_Pulgado.cpp

```

1  #include <iostream>
2  void add(int a, int b);
3  void compare(int a, int b);
4  bool number(bool a, bool b);
5
6  int main() {
7      add(6,8);
8      compare(3,5);
9      number(1,2);
10 }
11 void add(int a, int b){
12     std::cout<<"The sum is " << a + b<<std::endl;
13 }
14 void compare(int a, int b){
15     if(a>b){
16         std::cout<<"a is greater than b"<<std::endl;
17     }
18     else if (a<b){
19         std::cout<<"a is less than b"<<std::endl;
20     }
21     else{
22         std::cout<<"a is equal to b"<<std::endl;
23     }
24 }
25
26 bool number(bool a, bool b){
27     bool orResult = a || b;
28     bool andResult = a && b;
29     std::cout<<"the result of OR is: "<< orResult<<std::endl;
30     std::cout<<"the result of AND is: "<< andResult<<std::endl;
31
32     return true;
33 }

```

```

C:\Users\TIPQC\Documents\C
+
-
The sum is 14
a is less than b
the result of OR is: 1
the result of AND is: 1

-----
Process exited after 0.01862 seconds with return value 0
Press any key to continue . . .

```

```

#include <iostream>

class Triangle{
private:
    double totalAngle, angleA, angleB, angleC;
public:
    Triangle(double A, double B, double C);
    void setAngles(double A, double B, double C);
    const bool validateTriangle();
};

Triangle::Triangle(double A, double B, double C) {
    angleA = A;
    angleB = B;
    angleC = C;
    totalAngle = A+B+C;
}

void Triangle::setAngles(double A, double B, double C) {
    angleA = A;
    angleB = B;
    angleC = C;
    totalAngle = A+B+C;
}

const bool Triangle::validateTriangle() {
    return (totalAngle <= 180);
}

int main() {
    Triangle set1(40, 30, 110);
    if(set1.validateTriangle()){
        std::cout << "The shape is a valid triangle.\n";
    }
    else {
        std::cout << "The shape is NOT a valid triangle.\n";
    }
    return 0;
}

```

STDIN

Input for the program (Optional)

Output:

The shape is a valid triangle.

ILO C:

<pre>#include <iostream> int main() { int a = 5; int b = 10; std::cout << "a = " << a << ", b = " << b << std::endl; int swap = a; a = b; b = swap; std::cout << "a = " << a << ", b = " << b << std::endl; a = a + b; b = a - b; a = a - b; std::cout << "a = " << a << ", b = " << b << std::endl; return 0; }</pre>	<div>STDIN</div> <div>Input for the program</div> <div>Output: a = 5, b = 10 a = 10, b = 5 a = 5, b = 10</div>
<pre>#include <iostream> double kToF(double kelvin) { return (kelvin - 273.15) * 9.0 / 5.0 + 32; } int main() { double kelvin = 500.0; double fahrenheit = kToF(kelvin); std::cout << kelvin << " K is equal to " << fahrenheit << " °F" << std::endl; return 0; }</pre>	<div>STDIN</div> <div>Input for the program (Optional)</div> <div>Output: 500 K is equal to 440.33 °F</div>

7. Supplementary Activity

8. Conclusion

9. Assessment Rubric