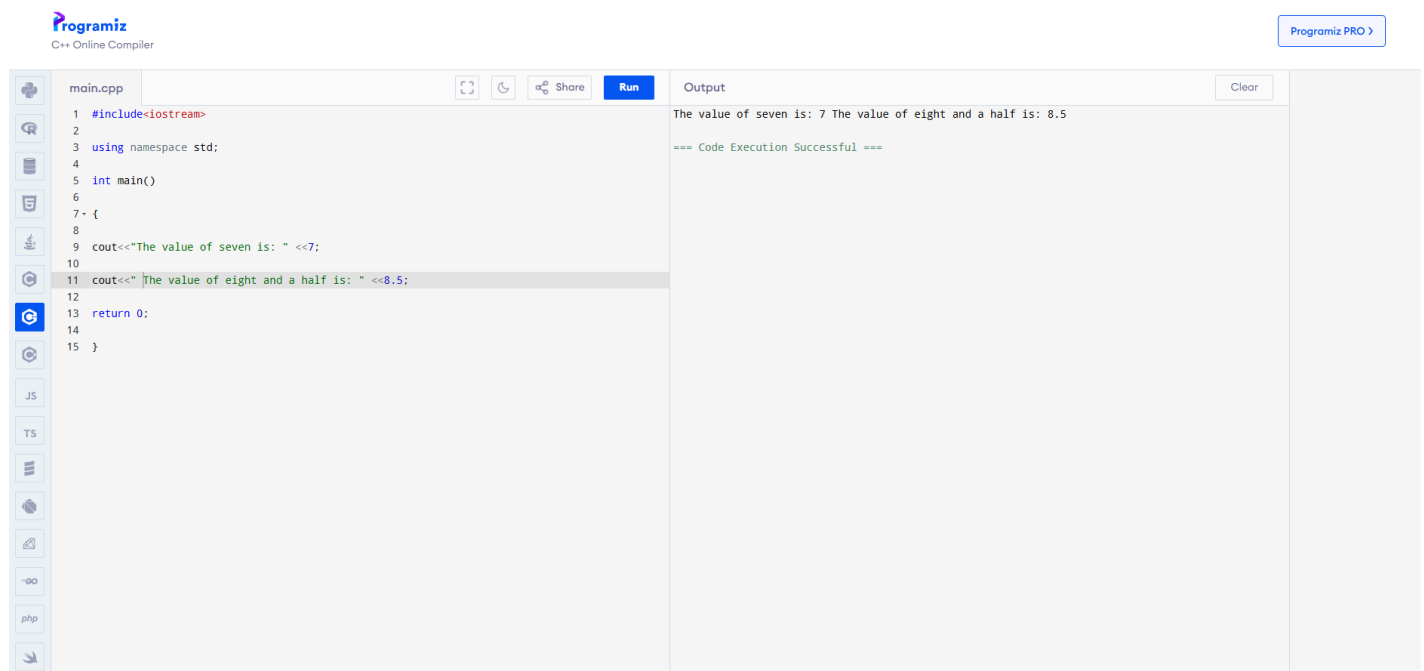| Activity No. 2.1	
<Replace with Title>	
Course Code: CPE010	**Program:** Computer Engineering
Course Title: Data Structures and Algorithms	**Date Performed:** 8/7/2025
Section: CPE11S1	**Date Submitted:** 8/7/2025
Name(s): Marqui Joshua Cenar	**Instructor:** Engr. Jimlord M. Quejado
6. Output	

Example 1: The following program has an output of:

The value of seven is: 7.000000

The value of eight and a half is: 8.500000

-.There was an unnecessary comma in the code

Example 2: The following program has an output of:

The value of seven is: 7.000000

The value of eight and a half is: 8.500000

- Unnecessary space

main.cpp

Output

Run | Clear

```cpp
1  #include <iostream>
2
3  using namespace std;
4
5  int main()
6
7  {
8
9  cout<<"The value of seven is: "<< 7;
10
11 cout<<" The value of eight and a half is: "<<8.5;
12
13 return 0;
14
15 }
```

The value of seven is: 7 The value of eight and a half is: 8.5

=== Code Execution Successful ===

Example 3: The following program has an output of:

The value of half is: 0.500000

The value of Pi is: 3.141593

- It was lacking certain codes and had some unnecessary underscores and spaces

main.cpp

Output

Run | Clear

```cpp
1  #include <iostream>
2
3  using namespace std;
4
5
6  int main()
7
8  {
9
10 float halfValue = 0.5;
11
12 float piValue = 3.14159265;
13
14 cout<<"The value of half is: "<< halfValue;
15
16 cout<<" The value of Pi is: "<<piValue;
17
18 return 0;
19
20 }
```

The value of half is: 0.5 The value of Pi is: 3.14159

=== Code Execution Successful ===

Example 4: Sample program for Adding Two Integers

-   Some symbols were reversed

main.cpp

Share   Run

```cpp
1  #include <iostream>
2  using namespace std;
3
4  int main()
5
6  {
7
8  int integer1, integer2, sum; /*declaration */
9
10 cout<<"Enter first integer: \n" ; /* prompt */
11
12 cin>>integer1 ;          /* read an integer */
13
14 cout<<"Enter second integer: \n" ; /* prompt */
15
16 cin>>integer2;           /* read an integer */
17
18 sum = integer1 + integer2;        /* assignment of sum */
19
20 cout<<"Sum is : "<<sum;      /* print sum */
21
22
23
24 return 0;   /* indicate that program ended successfully */
25
26 }
```

Output   Clear

```
Enter first integer:
45
Enter second integer:
72
Sum is : 117

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

7. Supplementary Activity

```
Programiz  C++ Online Compiler

main.cpp                                      Share   Run      Output

 1  #include<iostream>                                          result: 38
 2                                                              big result: 54872
 3  int main(void)
 4                                                              --- Code Execution Successful ---
 5  {
 6
 7      int xValue= 5;
 8      int yValue=9;
 9      int result;
10      int bigResult;
11
12      xValue += 3;
13      yValue -= xValue;
14      result = xValue * yValue;
15      result += result;
16      result -= 1;
17      yValue = result % result;
18      result += result + xValue;
19      bigResult = result * result * result;
20      result += xValue * yValue;
21
22      std::cout<<"result: "<<result << std::endl;
23
24      std::cout<<"big result: "<< bigResult;
25
26  return 0;
27
28  }
29
```



```
Programiz  C++ Online Compiler

main.cpp                                      Share   Run      Output

 1  #include<iostream>                                          After first year: 101.5
 2                                                              After second year: 103.022
 3  int main()                                                  After third year: 104.568
 4
 5  {                                                           --- Code Execution Successful ---
 6
 7      float startValue = 100;
 8
 9      float interestRate = 0.015;
10
11      float firstYearValue;
12
13      float secondYearValue;
14
15      float thirdYearValue;
16
17      firstYearValue = startValue * (1 + interestRate);
18      secondYearValue = firstYearValue * (1 + interestRate);
19      thirdYearValue = secondYearValue * (1 + interestRate);
20
21      std::cout<<"After first year: "<<firstYearValue << std::endl;
22      std::cout<<"After second year: "<<secondYearValue << std::endl;
23      std::cout<<"After third year: "<<thirdYearValue << std::endl;
24
25  return 0;
26
27  }
```

8. Conclusion

I learned that combining unique codes and patterns of phrases can make an interesting program even with some difficulties to code, it is still enjoyable to learn about. What I need to learn more about is how to make myself more knowledgeable when it comes to software.

9. Assessment Rubric

Rubric for SO 7 (6)

Criteria	Ratings						Pts
SO 7 PI 1 IILO4 Utilize lifelong learning skills in pursuit of personal development and excellence in professional practice. threshold: 4.8 pts	6 pts Excellent | Educational interests and pursuits exist and flourish outside classroom requirements,knowledge and/or experiences are pursued independently and applies knowledge learned into practice	5 pts Good | Educational interests and pursuits exist and flourish outside classroom requirements,knowledge and/or experiences are pursued independently	4 pts Satisfactory | Look beyond classroom requirements, showing interest in pursuing knowledge independently	3 pts Unsatisfactory | Begins to look beyond classroom requirements, showing interest in pursuing knowledge independently	2 pts Poor | Relies on classroom instruction only	1 pts Very Poor | No initiative or interest in acquiring new knowledge	6 pts
SO 7 PI 2 IILO4 Utilize lifelong learning skills in pursuit of personal development and excellence in professional practice. threshold: 4.8 pts	6 pts Excellent | Completes an assigned task independently and practices continuous improvement	5 pts Good | Completes an assigned task without supervision or guidance	4 pts Satisfactory | Requires minimal guidance to complete an assigned task	3 pts Unsatisfactory | Requires detailed or step-by-step instructions to complete a task	2 pts Poor | Shows little interest to complete a task independently	1 pts Very Poor | No interest to complete a task independently	6 pts
SO 7 PI 3 IILO4 Utilize lifelong learning skills in pursuit of personal development and excellence in professional practice. threshold: 4.8 pts	6 pts Excellent | Synthesizes and integrates information from a variety of sources; formulates a clear and precise perspective; draws appropriate conclusions	5 pts Good | Evaluate information from a variety of sources; formulates a clear and precise perspective.	4 pts Satisfactory | Analyze information from a variety of sources; formulates a clear and precise perspective.	3 pts Unsatisfactory | Apply the gathered information to formulate the problem	2 pts Poor | Gather and summarized the information from a variety of sources but failed to formulate the problem	1 pts Very Poor | Gather information from a variety of sources	6 pts
SO 7 PI 4 IILO4 Utilize lifelong learning skills in pursuit of personal development and excellence in professional practice. threshold: 4.8 pts	6 pts Excellent | Ideas are combined in original and creative ways in line with the new and emerging technology trends to solve a problem or address an issue.	5 pts Good | Ideas are creative and adapt the new knowledge to solve a problem or address an issue	4 pts Satisfactory | Ideas are creative in solving a problem, or address an issue	3 pts Unsatisfactory | Shows some creative ways to solve the problem	2 pts Poor | Shows initiative and attempt to develop creative ideas to solve the problem	1 pts Very Poor | Ideas are copied or restated from the sources consulted	6 pts

Total Points: 24