

## **Activity No. 2.2**

# <Replace with Title>

<b>Course Code:</b> CPE010	<b>Program:</b> Computer Engineering
<b>Course Title:</b> Data Structures and Algorithms	<b>Date Performed:</b> 8/12/2025
<b>Section:</b> 11S1	<b>Date Submitted:</b> 8/12/2025
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## 6. Output

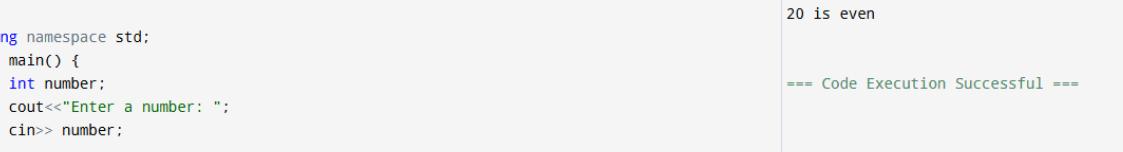
The screenshot shows a C++ development environment. On the left is a vertical toolbar with icons for various languages and tools. The main area is a code editor with the following C++ code:

```
main.cpp

1 #include <iostream>
2 using namespace std;
3 int main() {
4
5     int total = 0;           // Sum of all grades
6     int grade;              // Holds the current grade
7     int gradeCounter = 1;   // Counter for students
8
9
10
11
12    // Loop to get 10 grades
13    while (gradeCounter <= 10) {
14        cout << "Enter grade for student " << gradeCounter << ": ";
15        cin >> grade;
16        total += grade;
17        gradeCounter++;
18    }
19    // Calculate the average
20    double classAverage = total / 10.0;
21
22    // Display the result
23    cout << "InClass average is: " << classAverage << endl;
24    return 0;
25 }
```

The toolbar at the top includes icons for file operations, a refresh button, a share button, and a blue "Run" button. To the right of the code editor is an "Output" panel containing the text: "Enter grade for student 1: 98".

## **7. Supplementary Activity**



The screenshot shows a code editor interface with the following components:

- Left Sidebar:** A vertical sidebar with icons for different file types: C/C++ (selected), Java, Python, C#, Go, and JavaScript.
- File Tab:** The tab bar shows "main.cpp".
- Toolbar:** Includes icons for Undo, Redo, Share, and Run.
- Code Area:** The main area contains the following C++ code:

```
1 #include <iostream>
2
3 using namespace std;
4 int main() {
5     int number;
6     cout<<"Enter a number: ";
7     cin>> number;
8
9     if(number % 2 == 0) {
10         cout<<number<<" is even "<<endl;
11     }
12     else{
13         cout<<number<<"is odd."<<endl;
14     }
15
16
17 }
```
- Output Area:** Shows the execution results:

Enter a number: 20  
20 is even  
  
=====  
Code Execution Successful

C++ Online Compiler

main.cpp

RunOutput

```
1 #include <iostream>
2
3 using namespace std;
4 int main() {
5     int age;
6     double fare = 10.0; // Base fare
7
8
9     cout << "Enter your age: ";
10    cin>> age;
11
12    if(age >= 60) {
13        fare -= fare * 0.10;
14    }
15    else if (age >= 0 && age <= 25) {
16        fare -= fare * 0.08;
17    }
18    if (fare<9.0) {
19        fare = 0.0;
20    }
21    cout << "Your fare is: " << fare << " pesos. " << endl;
22
23
24 }
```

Enter your age: 60  
Your fare is: 9 pesos.

==== Code Execution Successful ===

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main.cpp

Run Output Clear

```
1 #include <iostream>
2 using namespace std;
3
4 int main() {
5     int grade;
6     int total = 0;
7     int counter = 0;
8     double average;
9
10    cout << "Enter your grade (-1 to stop): ";
11    cin >> grade;
12
13    while (grade != -1){
14        total += grade;
15        counter++;
16        cout << " 1.25 (-1 to stop): ";
17        cin >> grade;
18    }
19
20    if (counter != 0) {
21        average = static_cast<double>(total) / counter;
22        cout << "Class average is " << average << endl;
23    } else {
24        cout << "No grades were entered." << endl;
25    }
26    return 0;
27 }
```

Output

```
Enter your grade (-1 to stop):90
Enter your grade (-1 to stop):91
Enter your grade (-1 to stop):92
Enter your grade (-1 to stop):93
Enter your grade (-1 to stop):94
Enter your grade (-1 to stop):95
Enter your grade (-1 to stop):96
Enter your grade (-1 to stop):97
Enter your grade (-1 to stop):98
Enter your grade (-1 to stop):99
Enter your grade (-1 to stop): -1
Class average is:94
```

## 8. Conclusion

I learned that doing these programs to make or manipulate a computer to have decisions using "if" and "else" statements.

## **9. Assessment Rubric**

Rubric for SO 7 (7)							
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