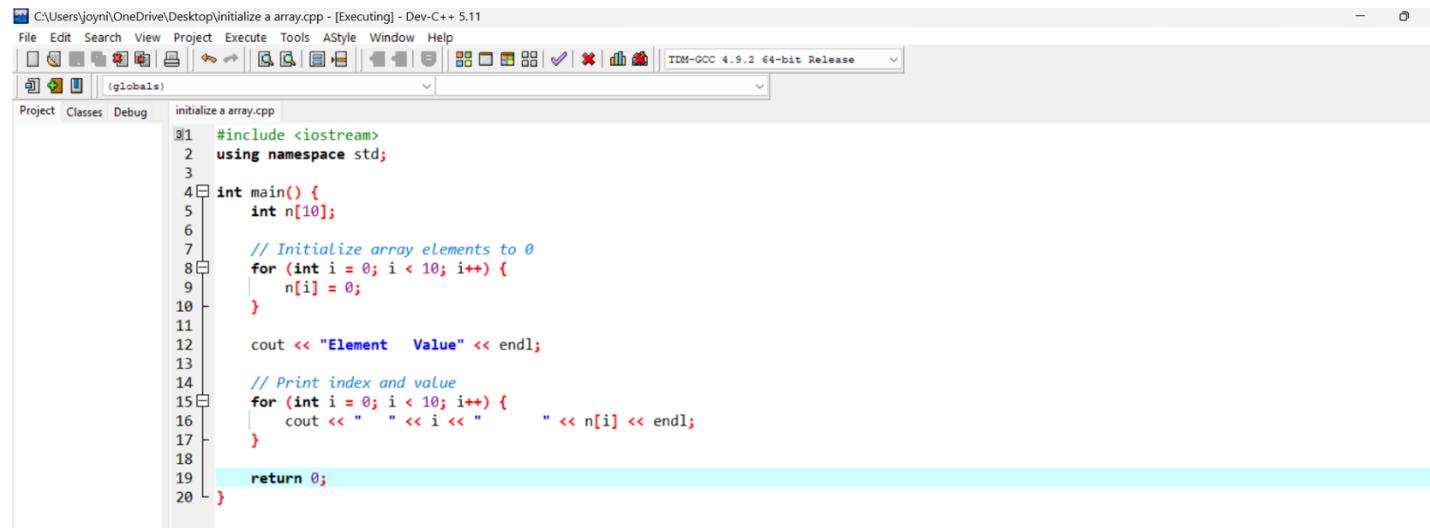


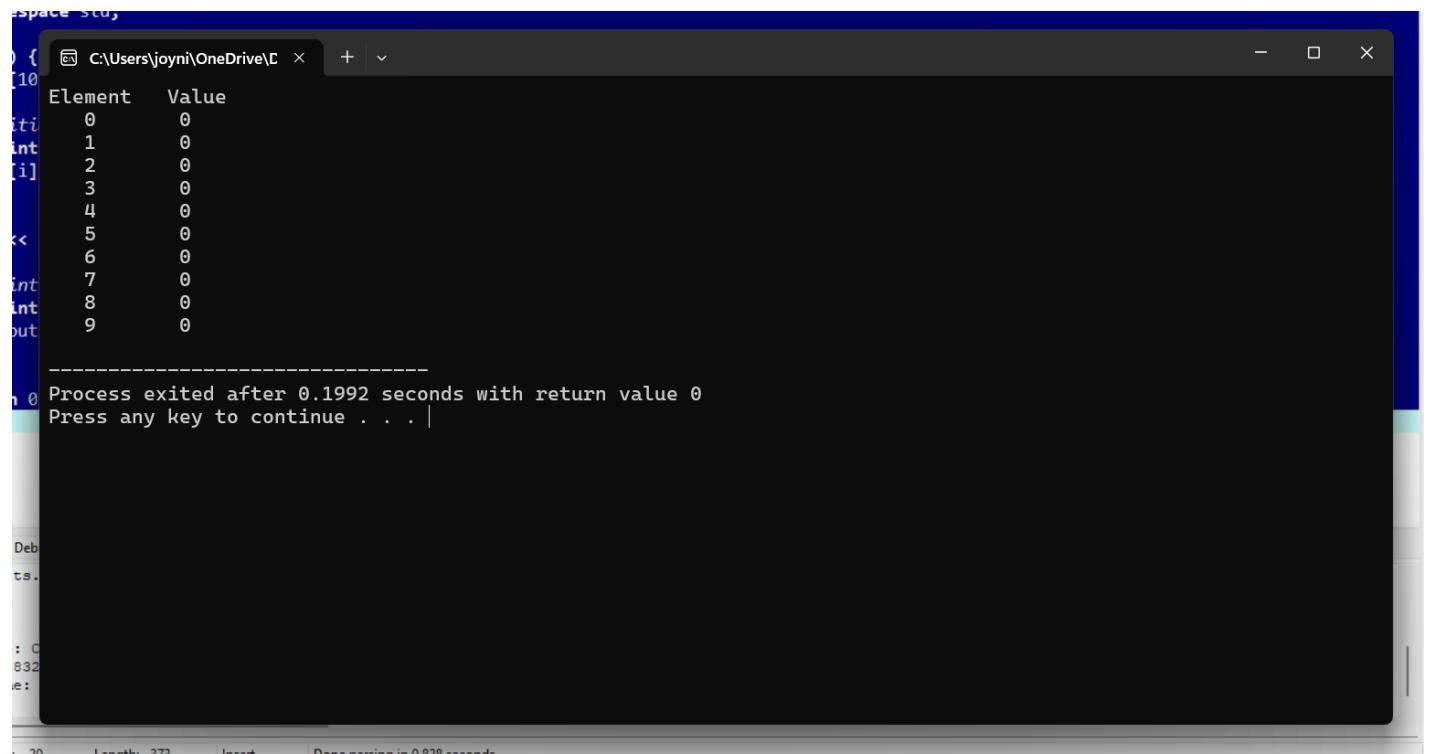
Activity No. <n>**<Replace with Title>**

Course Code: CPE008	Program: Computer Engineering
Course Title: Programming Logic and Design	Date Performed: 09/11/25
Section: CPE11S1	Date Submitted: 09/13/25
Name(s): Cenndy M. Nieles	Instructor: Engr. Jimlord Quejado

6. Output:**INPUT:**

The screenshot shows the Dev-C++ IDE interface. The title bar reads "C:\Users\joyni\OneDrive\Desktop\initialize a array.cpp - [Executing] - Dev-C++ 5.11". The menu bar includes File, Edit, Search, View, Project, Execute, Tools, AStyle, Window, Help. The toolbar has icons for New, Open, Save, Run, Stop, etc. The status bar at the bottom right says "TDM-GCC 4.9.2 64-bit Release". The code editor window displays the following C++ code:

```
#include <iostream>
using namespace std;
int main() {
    int n[10];
    // Initialize array elements to 0
    for (int i = 0; i < 10; i++) {
        n[i] = 0;
    }
    cout << "Element Value" << endl;
    // Print index and value
    for (int i = 0; i < 10; i++) {
        cout << " " << i << " " << n[i] << endl;
    }
    return 0;
}
```

OUTPUT:

The screenshot shows a terminal window with the following output:

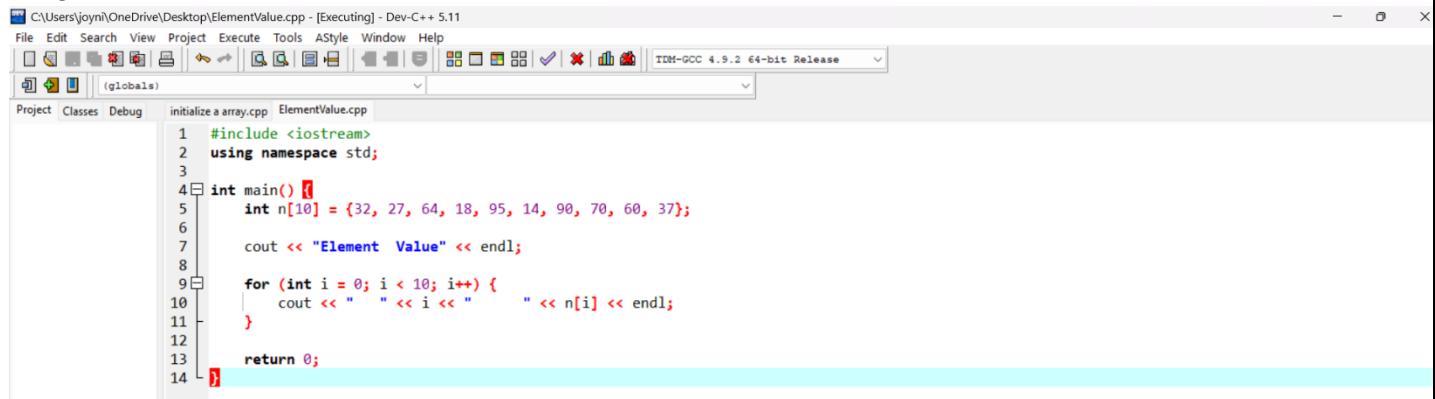
```
Element Value
0 0
1 0
2 0
3 0
4 0
5 0
6 0
7 0
8 0
9 0

Process exited after 0.1992 seconds with return value 0
Press any key to continue . . . |
```

EXPLANATION:

The input first put a #include <iostream> directive. Using namespace std; is written a namespace is a declarative area that gives the identifiers (variable, function, class, etc.) inside an object a scope. The array in C++ language are 0 - base, the array index ranges from 0 to 9. And initialize the array elements to 0. For loop just continue until you can reach the printed of all 10 elements and if the loops end your code is going to stop then put a return 0; it means your output is done and your program stop running. And this easy or basic introduction of arrays. Understanding this code is an important first step in learning C++ programming. You just need to understand the problem actually I was really confusing how to do this because in my real life it's my first time to experiencing a coding skills I was so challenging to do but day by day I was learn how to do but sometimes I can't avoid to make a mistake in coding.

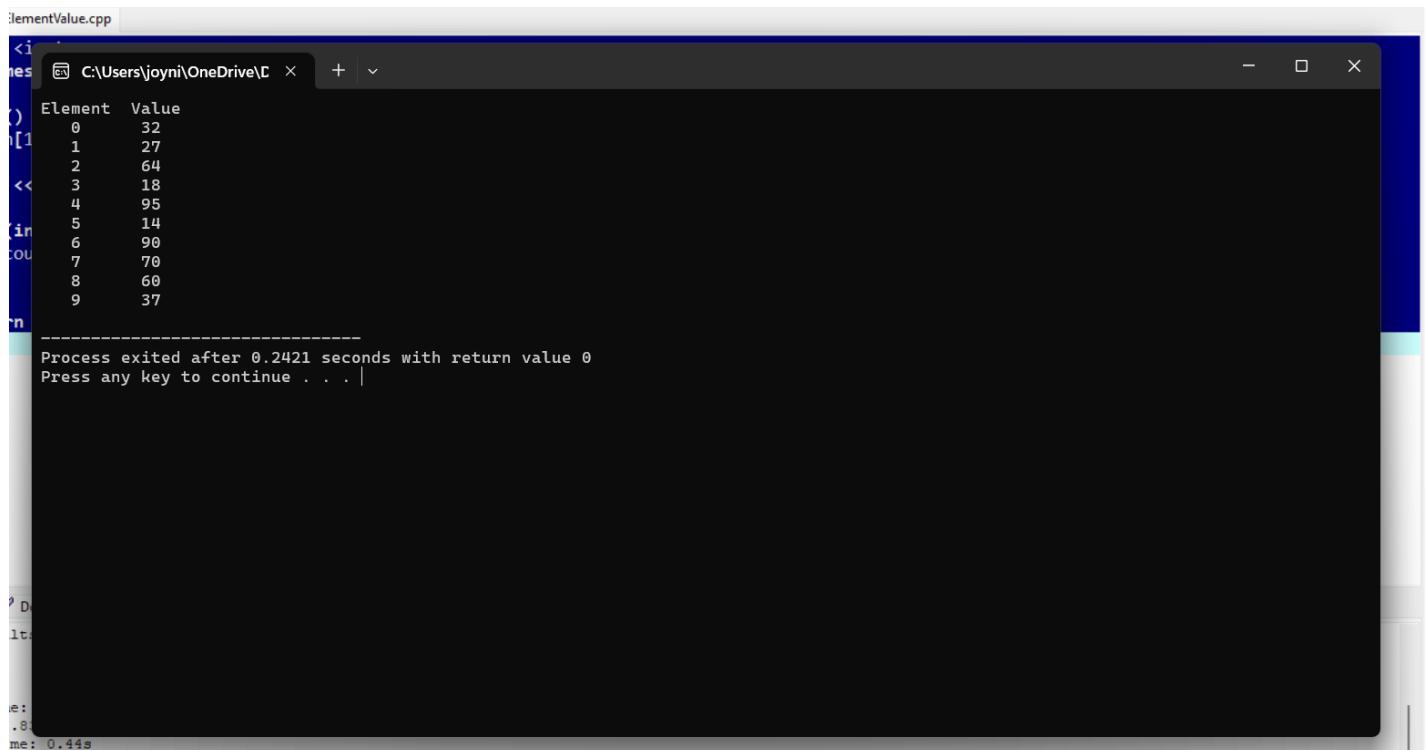
INPUT:



A screenshot of the Dev-C++ IDE interface. The title bar reads "C:\Users\joyni\OneDrive\Desktop\ElementValue.cpp - [Executing] - Dev-C++ 5.11". The menu bar includes File, Edit, Search, View, Project, Execute, Tools, AStyle, Window, Help. The toolbar has various icons for file operations. The status bar at the bottom right says "TDM-GCC 4.9.2 64-bit Release". The code editor window shows the following C++ code:

```
initialize a array.cpp ElementValue.cpp
1 #include <iostream>
2 using namespace std;
3
4 int main() {
5     int n[10] = {32, 27, 64, 18, 95, 14, 90, 70, 60, 37};
6
7     cout << "Element Value" << endl;
8
9     for (int i = 0; i < 10; i++) {
10         cout << " " << i << " " << n[i] << endl;
11     }
12
13     return 0;
14 }
```

OUTPUT:



A screenshot of a terminal window titled "ElementValue.cpp". The window displays the following text:

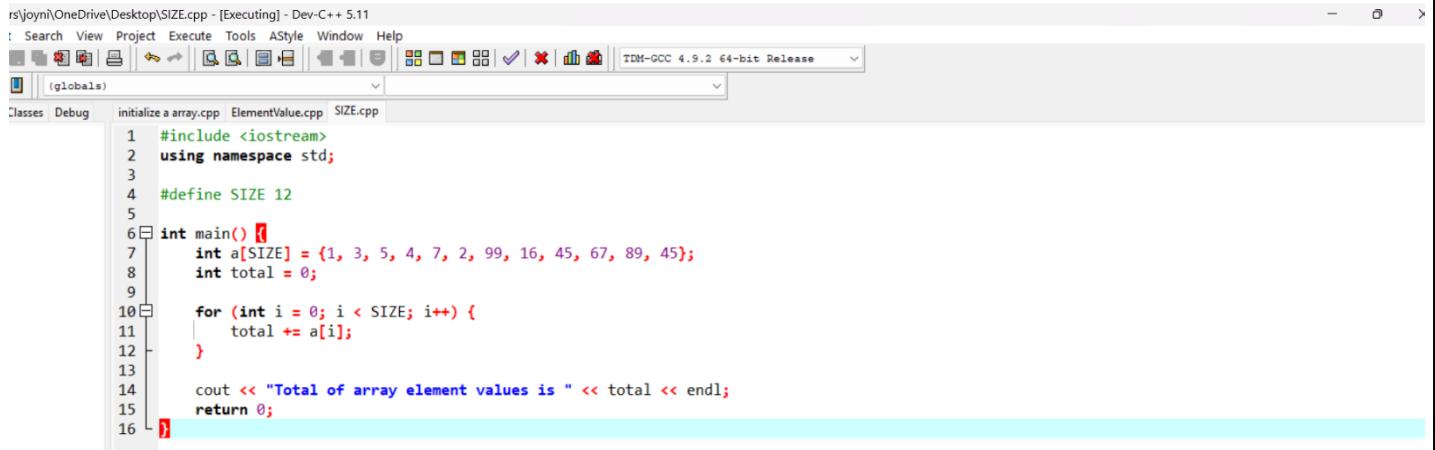
```
Element Value
0 32
1 27
2 64
3 18
4 95
5 14
6 90
7 70
8 60
9 37

Process exited after 0.2421 seconds with return value 0
Press any key to continue . . . |
```

EXPLANATION:

Look the problem and think what the steps you going to do so that the results is same in that given. #include <iostream> to provide input/output of the code like printing what you want to print your code. Using namespace std; which contains standard C++ functions and objects, main() { this is the main function where you going to input your code then declared a integers array named initialized the array value. Prints "Elements Value" to console. Return 0; the code successful program run. This code showcase to declare integer in array, then printing each element's index value.

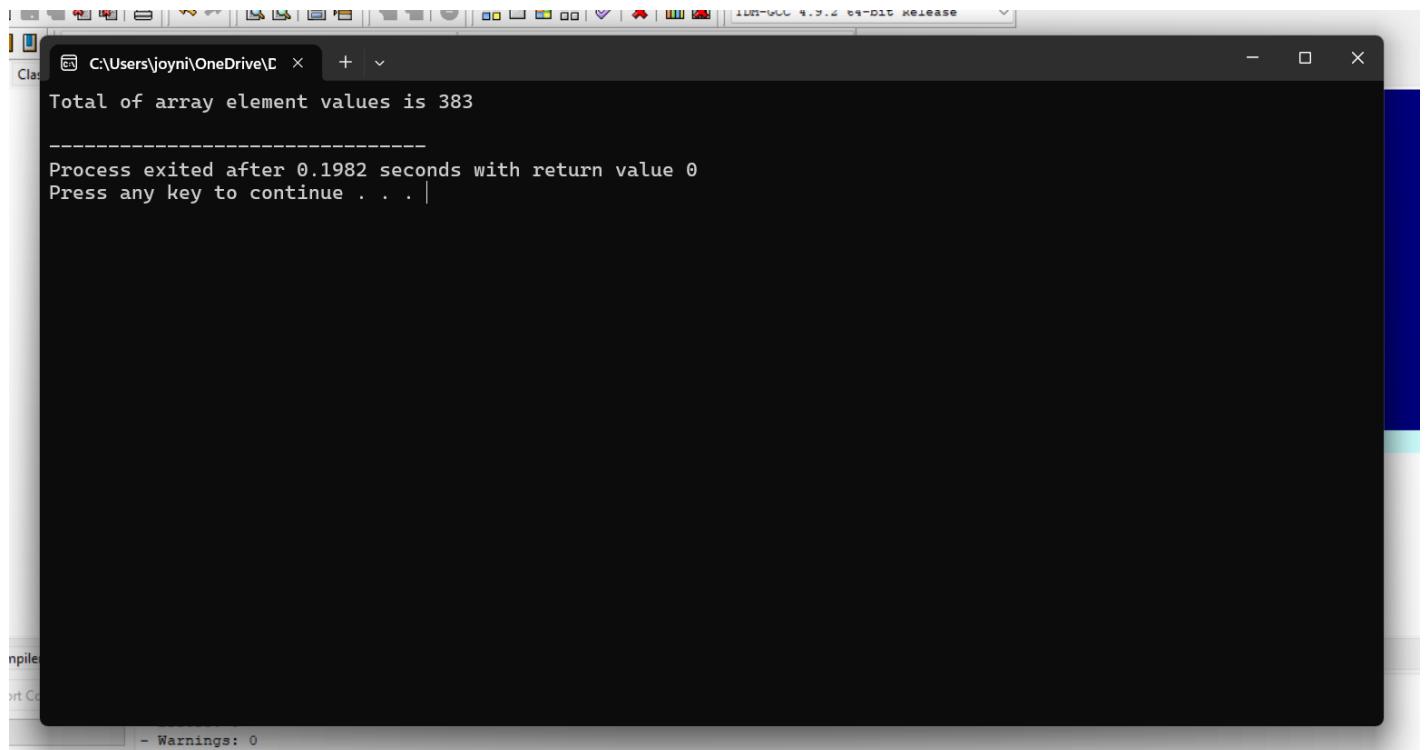
INPUT:



The screenshot shows the Dev-C++ IDE interface. The menu bar includes Search, View, Project, Execute, Tools, AStyle, Window, and Help. The toolbar has various icons for file operations. The status bar at the bottom right says TDM-GCC 4.9.2 64-bit Release. The code editor window displays the following C++ code:

```
rs\joyni\OneDrive\Desktop\SIZE.cpp - [Executing] - Dev-C++ 5.11
1 #include <iostream>
2 using namespace std;
3
4 #define SIZE 12
5
6 int main() {
7     int a[SIZE] = {1, 3, 5, 4, 7, 2, 99, 16, 45, 67, 89, 45};
8     int total = 0;
9
10    for (int i = 0; i < SIZE; i++) {
11        total += a[i];
12    }
13
14    cout << "Total of array element values is " << total << endl;
15
16    return 0;
}
```

OUTPUT:



The screenshot shows a terminal window with the following output:

```
C:\Users\joyni\OneDrive\... Total of array element values is 383
-----
Process exited after 0.1982 seconds with return value 0
Press any key to continue . . . |
```

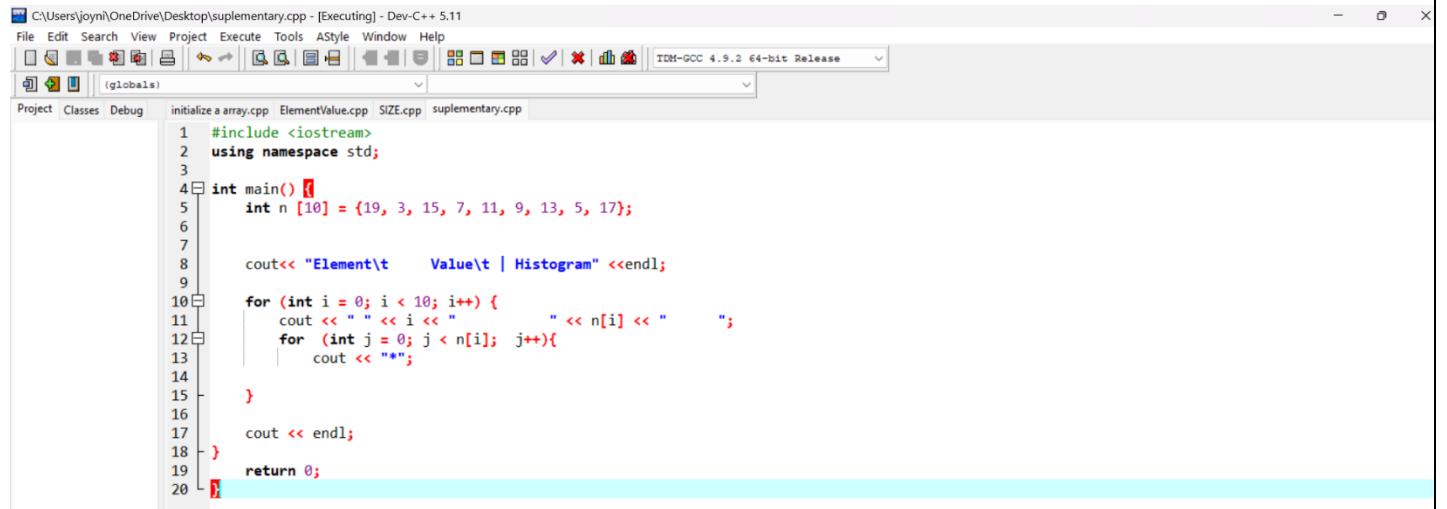
EXPLANATION:

Include a header for input/output of code. Then defined a process of size with value of 12 to specify the size of array. Begin to the main function program declare a integers array size and initialize the given

values. A variable total is set in 0 for loops iterates the array, adding each element to total. Then the code prints the “Total of array element value then calculate the total. The program return 0; it mean your code successful completion. Your output shows the sum is 383.

7. Supplementary Activity:

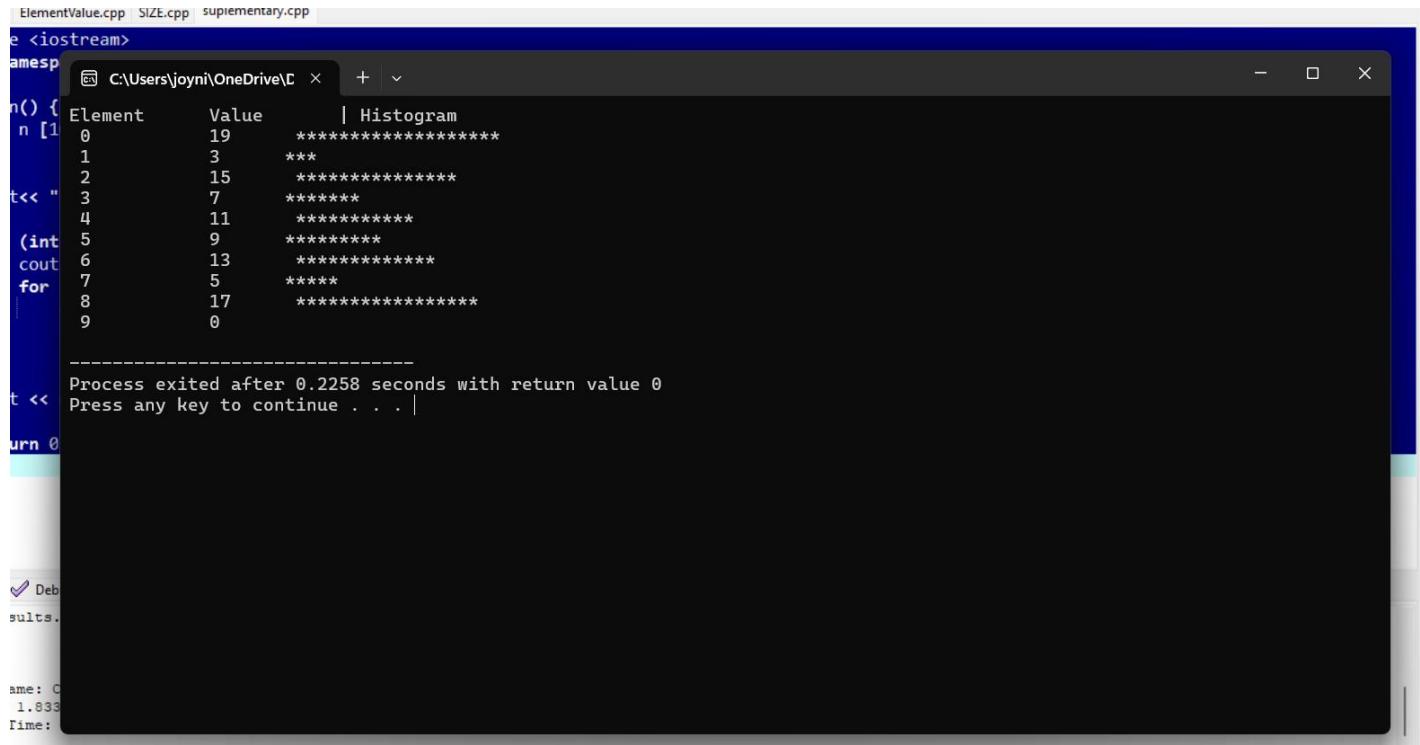
INPUT:



The screenshot shows the Dev-C++ IDE interface. The title bar reads "C:\Users\joyni\OneDrive\Desktop\supplementary.cpp - [Executing] - Dev-C++ 5.11". The menu bar includes File, Edit, Search, View, Project, Execute, Tools, AStyle, Window, Help. The toolbar has various icons for file operations. The status bar at the bottom right says "IDM-GCC 4.9.2 64-bit Release". The code editor window displays the following C++ code:

```
1 #include <iostream>
2 using namespace std;
3
4 int main() {
5     int n [10] = {19, 3, 15, 7, 11, 9, 13, 5, 17};
6
7     cout<< "Element\t Value\t | Histogram" <<endl;
8
9     for (int i = 0; i < 10; i++) {
10        cout << " " << i << " " << n[i] << " ";
11        for (int j = 0; j < n[i]; j++){
12            cout << "*";
13        }
14    }
15
16    cout << endl;
17 }
18
19 return 0;
20 }
```

OUTPUT:



The screenshot shows a terminal window titled "C:\Users\joyni\OneDrive\Dev-C++\bin\Debug" with the command "supplementary". The output shows the following histogram:

Element	Value	Histogram
0	19	*****
1	3	***
2	15	*****
3	7	*****
4	11	*****
5	9	*****
6	13	*****
7	5	*****
8	17	*****
9	0	

Process exited after 0.2258 seconds with return value 0
Press any key to continue . . . |

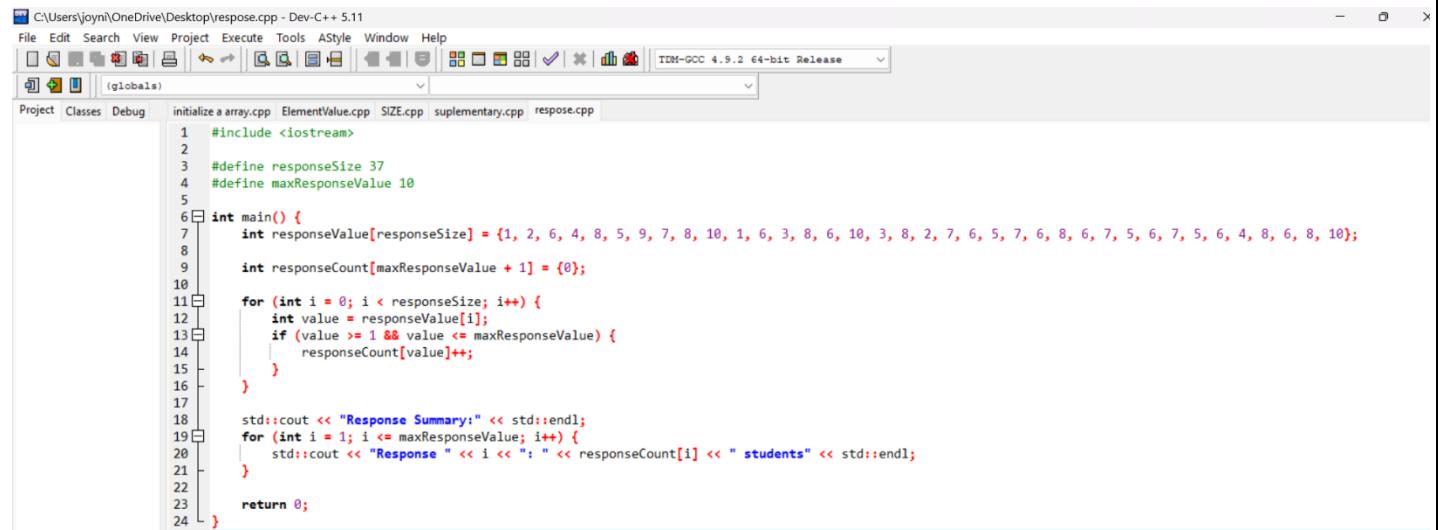
The terminal also shows the command "run 0" and some debug information at the bottom.

EXPLANATION:

The steps that I do first `#include <iostream>` for input/output of code using name `std`; then follow of the `main` function `main() {` where you going to start the program execution begins then declares an integer

array and initialize it with given value. Then Print the header “Element Value Histogram” with tab space in between, then for loop iterates though each element of the array then print the index (element number) and the corresponding value from the array. And this loop prints a asterisks * to represent the Histogram. The number of asterisks is equal to the value of n[i] in the code. Return 0; means your code successful run of your program. That's the step that I do just remember before you going do show and think first how can you get it.

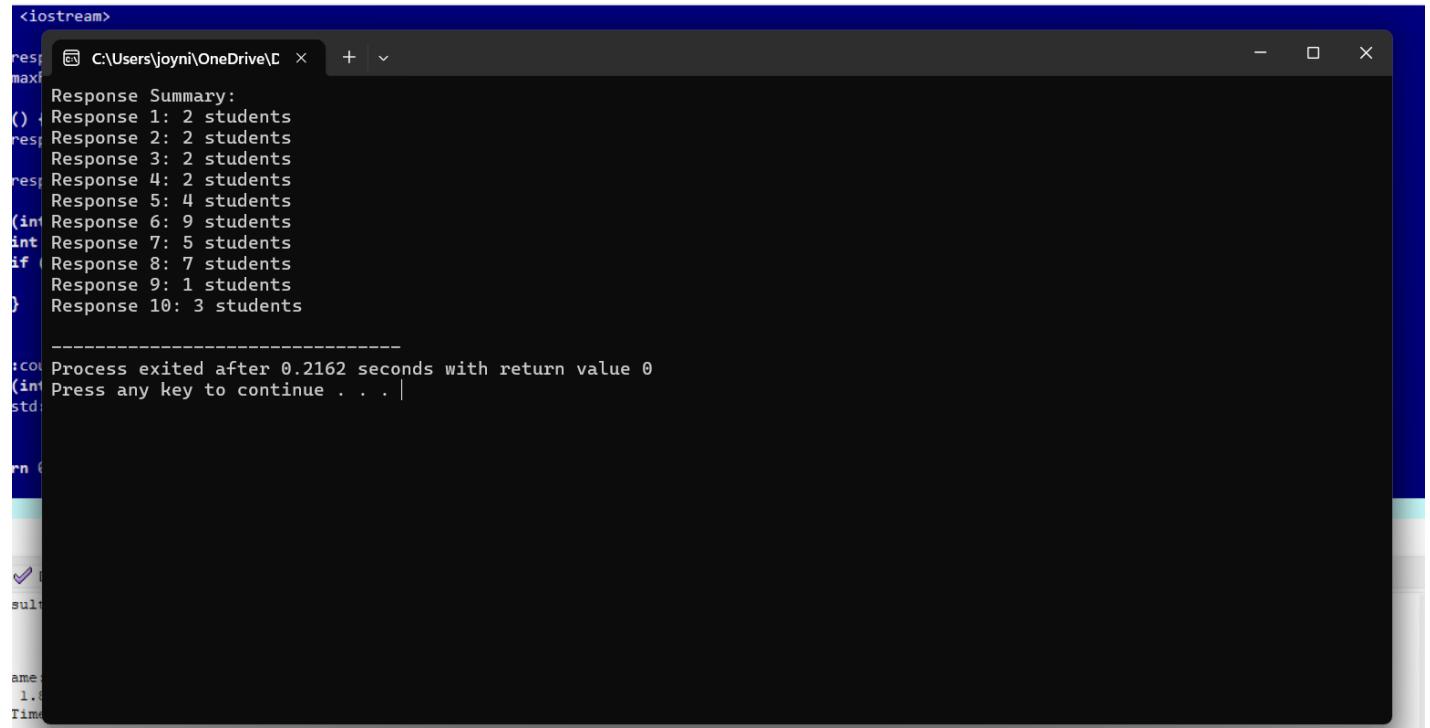
INPUT:



```

C:\Users\joyni\OneDrive\Desktop\response.cpp - Dev-C++ 5.11
File Edit Search View Project Execute Tools AStyle Window Help
(globals) Project Classes Debug initialize a array.cpp ElementValue.cpp SIZE.cpp supplementary.cpp response.cpp
1 #include <iostream>
2
3 #define responseSize 37
4 #define maxResponseValue 10
5
6 int main() {
7     int responseValue[responseSize] = {1, 2, 6, 4, 8, 5, 9, 7, 8, 10, 1, 6, 3, 8, 6, 10, 3, 8, 2, 7, 6, 5, 7, 6, 8, 6, 7, 5, 6, 7, 5, 6, 4, 8, 6, 8, 10};
8
9     int responseCount[maxResponseValue + 1] = {0};
10
11    for (int i = 0; i < responseSize; i++) {
12        int value = responseValue[i];
13        if (value >= 1 && value <= maxResponseValue) {
14            responseCount[value]++;
15        }
16    }
17
18    std::cout << "Response Summary:" << std::endl;
19    for (int i = 1; i <= maxResponseValue; i++) {
20        std::cout << "Response " << i << ":" << responseCount[i] << " students" << std::endl;
21    }
22
23    return 0;
24 }
```

OUTPUT:



```

<iostream>
res C:\Users\joyni\OneDrive\C + ~
max()
() Response Summary:
Response 1: 2 students
Response 2: 2 students
Response 3: 2 students
Response 4: 2 students
Response 5: 4 students
Response 6: 9 students
Response 7: 5 students
Response 8: 7 students
Response 9: 1 students
Response 10: 3 students
-----
Process exited after 0.2162 seconds with return value 0
Press any key to continue . . . |
```

EXPLANATION:

Show the problem it's defined a the response of student. First is you going to #include <iostream> then you going to defined a symbol of constant assign to the value. Then defined a constant of maxresponse value with a value of 10 seems it's a maximum possible value for response. Int main() { start the main function of the program declared an integer array the responsevalue and responseSize and initialized the provided response balue.Then prints the response value and it's corresponding cout from the responseCout array then type Return 0; so means your code stops and run means your code is successfully program.

:8. Conclusion

Past days we discuss about the arrays what is part of arrays and the function. Array are fundamental of data structure that stored a collection of elements of the same data type. Swapping is the process of exchanging the values and the two variables store the value of the variable in temporary variable. For Bubble sort it's repeatedly stepping though a list , comparing adjacent elements, swapping them if there's wrong order. Arrays are often named by adding a final word that implies a group, such as priceList, priceTable, or priceArray. The parts of array is element data type(int) array name(scores) array size [10].The element is a single value stored in an array where each other element must have the same data type. Each element is identified by it's index number inside the array. Index the position of an element in the array Storing Data in a array, Code Implement a then we tackled the pseudocode it's a steps in alogarithm using a mix convention and the flowchart it's a diagram that visually represent the workchart or process using standardized symbols. It's explain that how can you get the program and the steps that going to used but it's challenging because I was confusing sometimes there's a part of function that I can't catch up but still continued. Learning a basic program because it's important.

9. Assessment Rubric