

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. Nieleo	Instructor: Engr. Jimlord Quejado

6. Output:

INPUT:

```
C:\Users\joyni\OneDrive\Desktop\initialize a array.cpp - [Executing] - Dev-C++ 5.11
File Edit Search View Project Execute Tools AStyle Window Help
[Icons] (globals) TDM-GCC 4.9.2 64-bit Release
Project Classes Debug initialize a array.cpp
1 #include <iostream>
2 using namespace std;
3
4 int main() {
5     int n[10];
6
7     // Initialize array elements to 0
8     for (int i = 0; i < 10; i++) {
9         n[i] = 0;
10    }
11
12    cout << "Element Value" << endl;
13
14    // Print index and value
15    for (int i = 0; i < 10; i++) {
16        cout << " " << i << " " << n[i] << endl;
17    }
18
19    return 0;
20 }
```

OUTPUT:

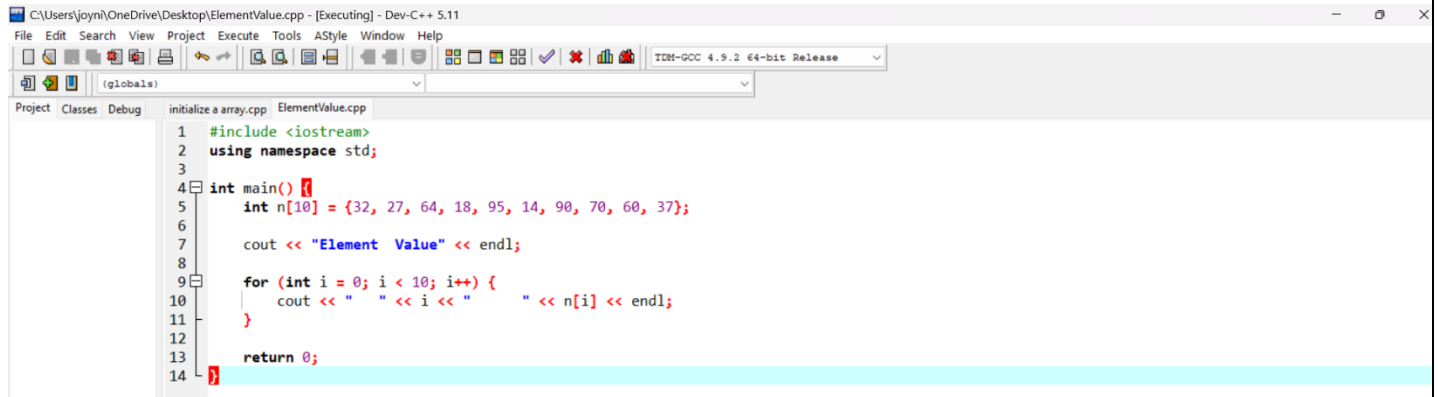
```
C:\Users\joyni\OneDrive\...
Element Value
0 0
1 0
2 0
3 0
4 0
5 0
6 0
7 0
8 0
9 0

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

EXPLANATION:

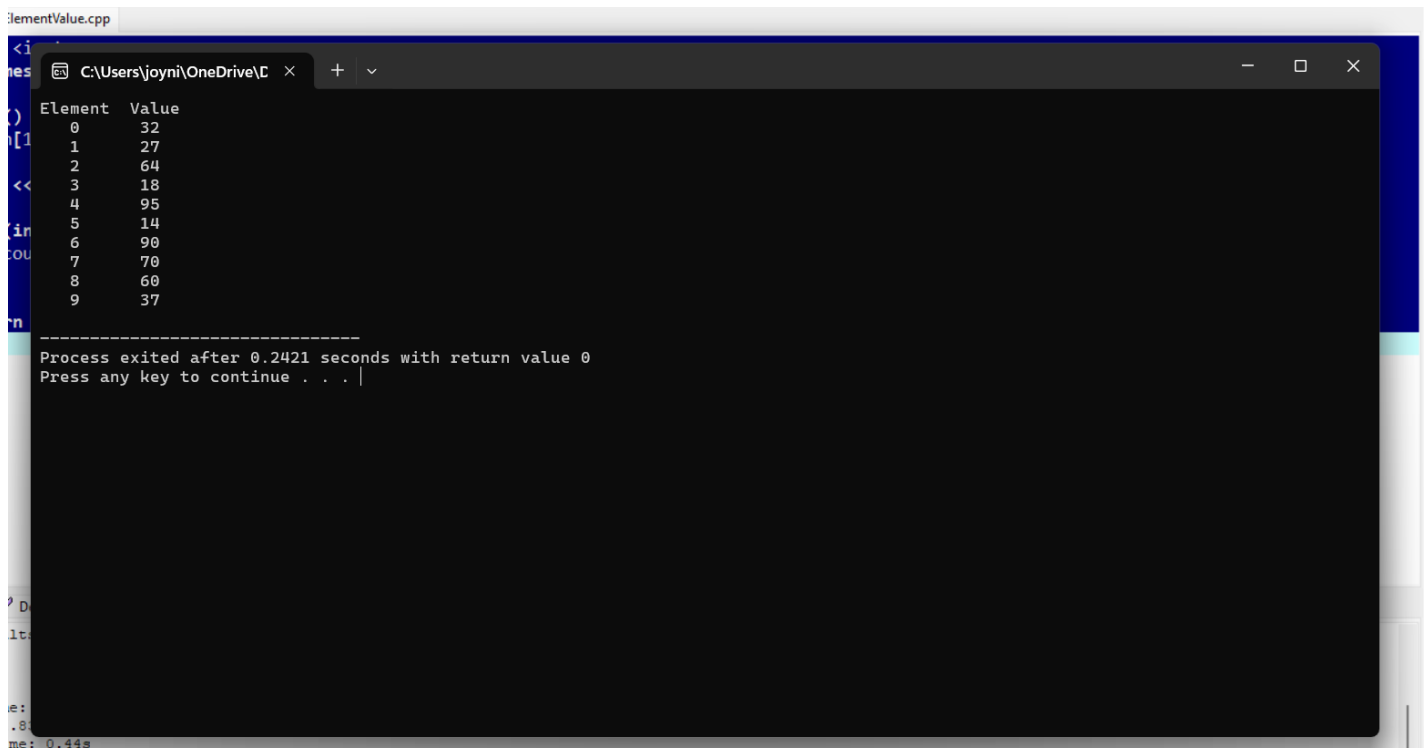
The input first put a `#include <iostream>` directive. Using namespace `std`; is written a namespace is a declarative area that gives the identifiers (variable, function, class, etc.) inside an object a scope. The array in C++ language are 0 - base, the array index ranges from 0 to 9. And initialize 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:



```
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:



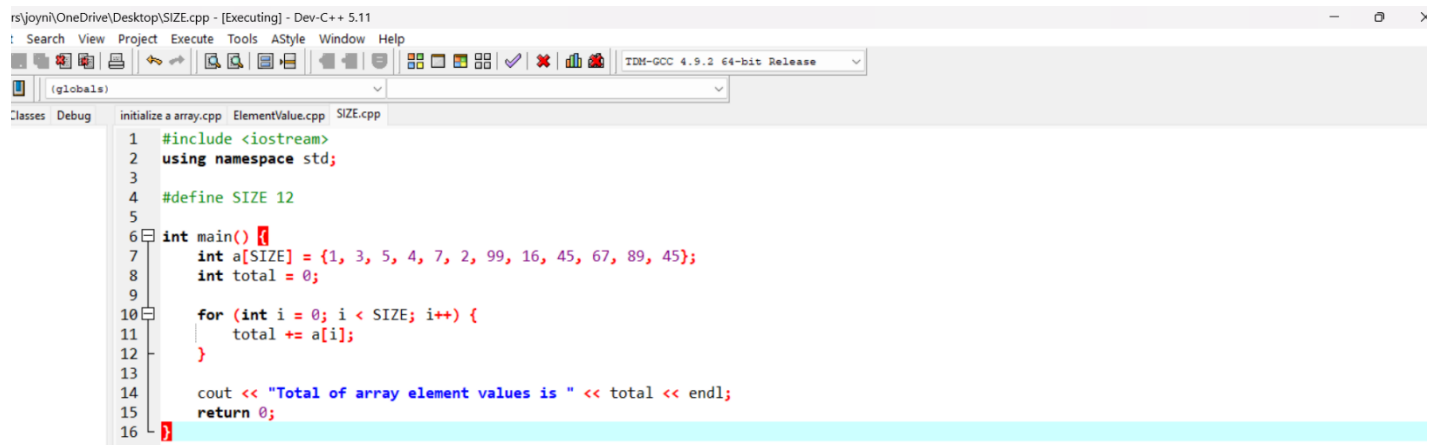
```
Element Value
0 32
1 27
2 64
3 18
4 95
5 14
6 90
7 70
8 60
9 37

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

### EXPLANATION:

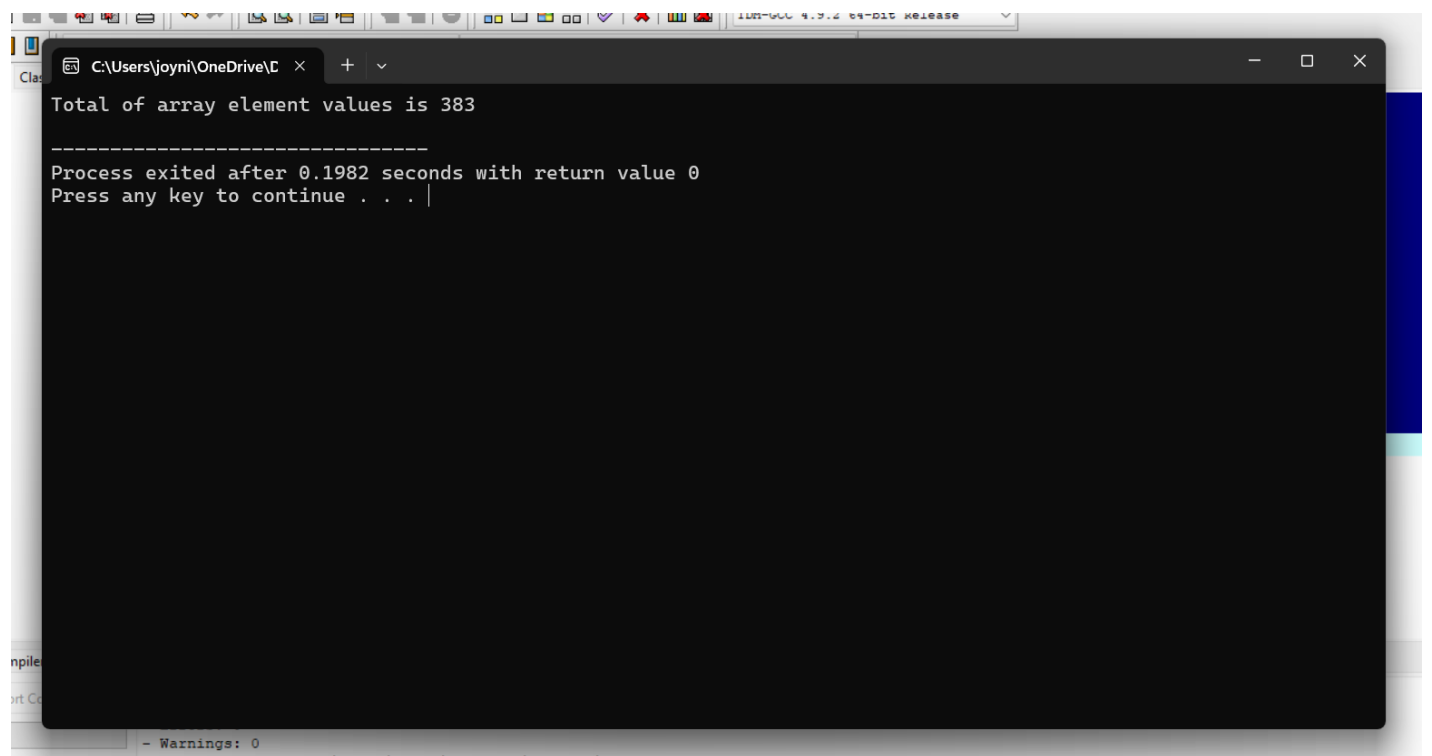
Look the problem and think what the steps you going to do so that the results is same in that given. `#include <iostream>` to provide input/output of the code like printing what you want to print your code. Using namespace `std`; which contains standard C++ functions and objects, `main()` { this is the 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:



```
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    return 0;
16 }
```

## OUTPUT:



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

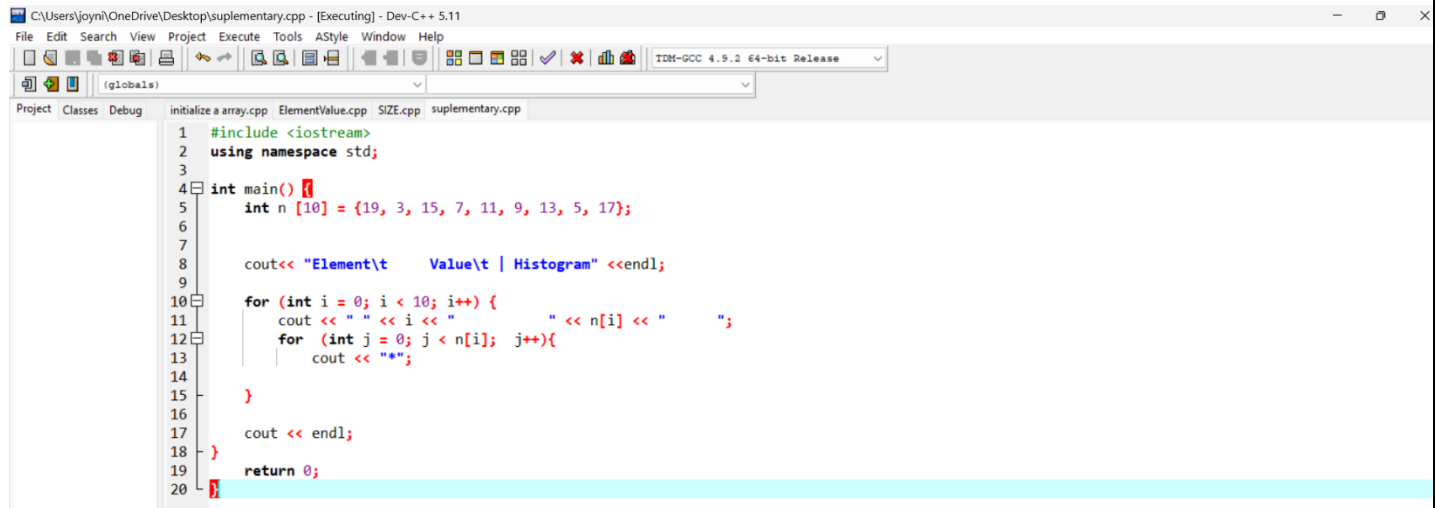
## EXPLANATION:

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.

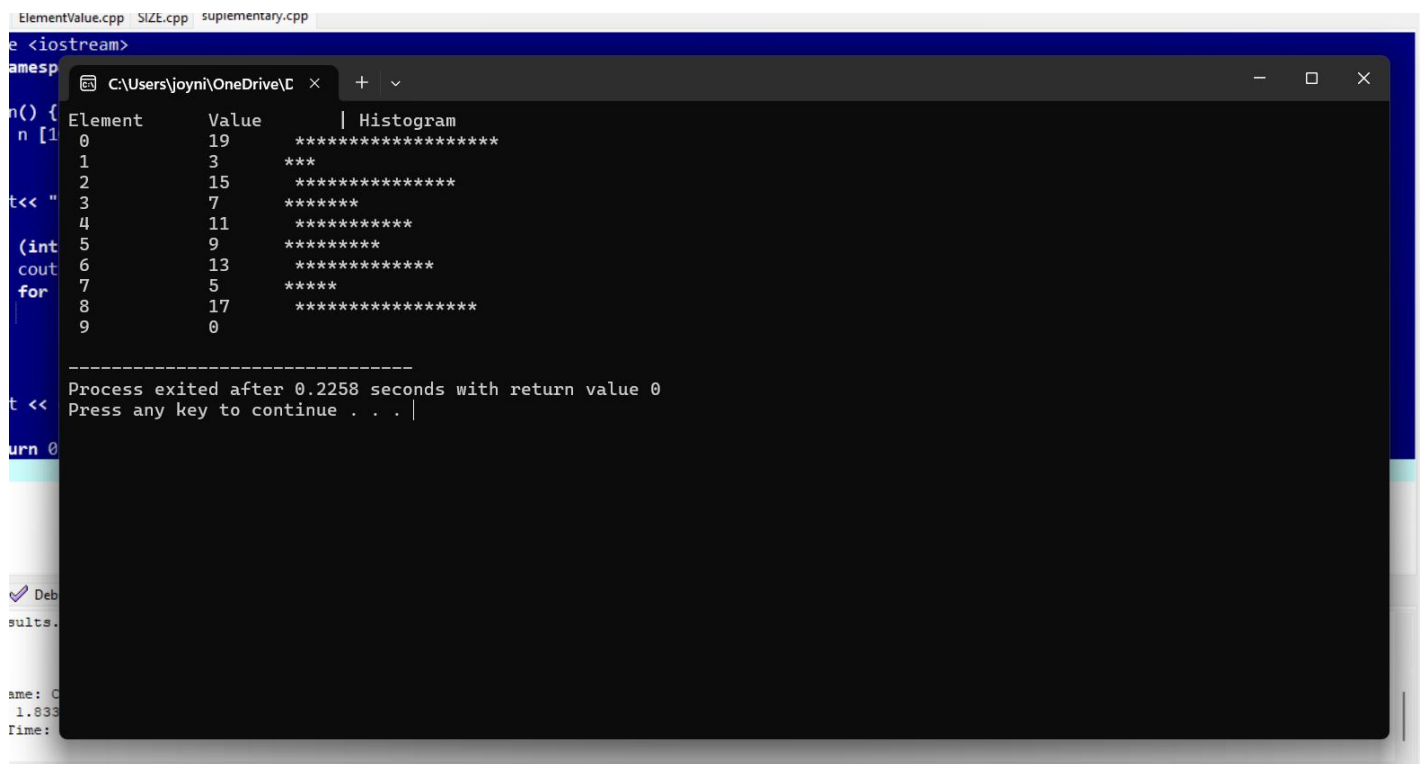
## 7. Supplementary Activity:

### INPUT:



```
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:



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

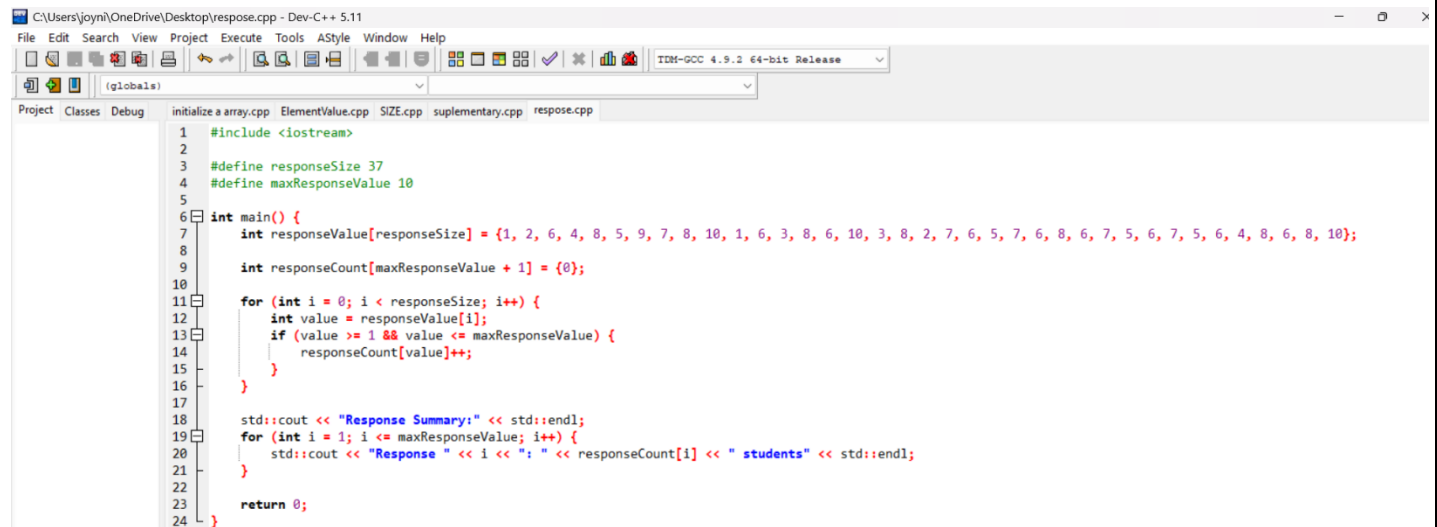
-----
Process exited after 0.2258 seconds with return value 0
Press any key to continue . . .
```

### 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

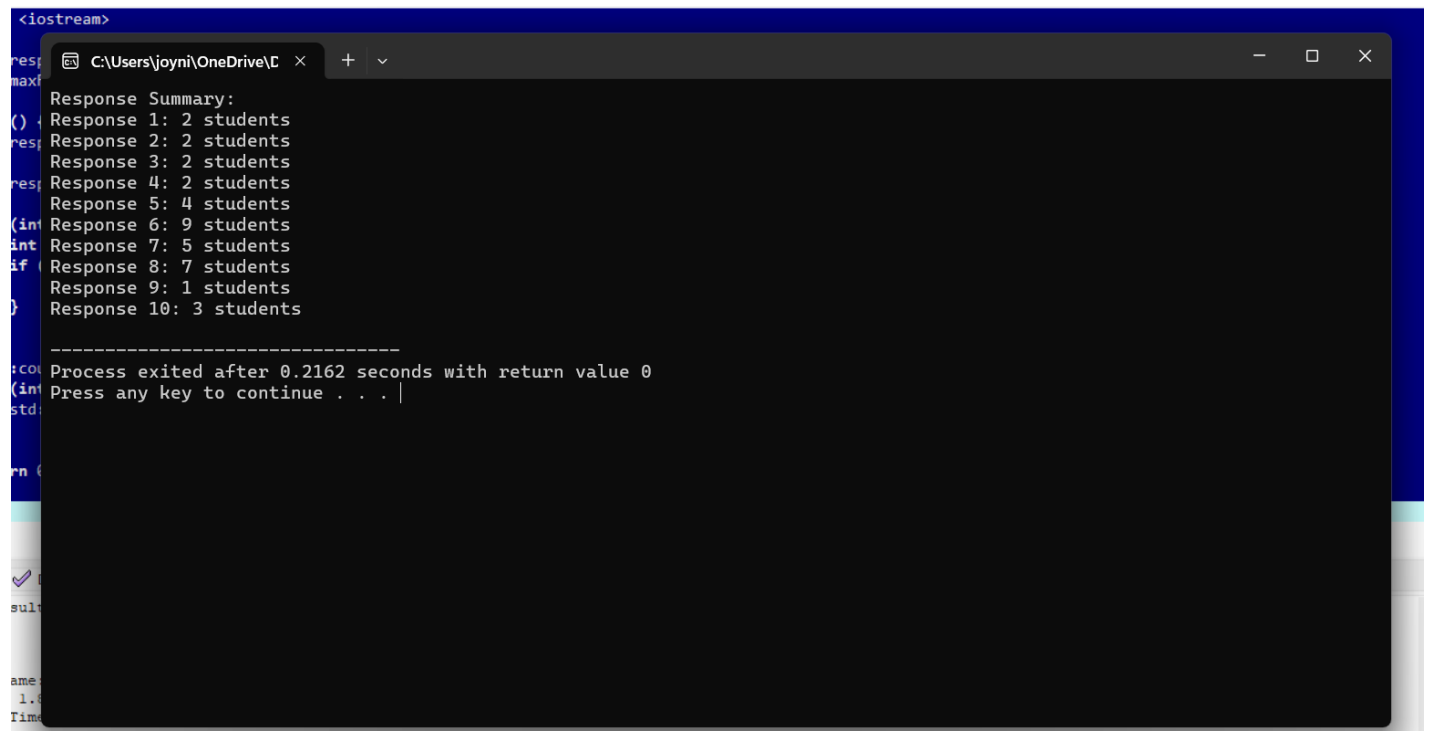
array and initialize it with given value. Then Print the header “Element Value Histogram” with tab space in between, then for loop iterates though each element of the array then print the index ( element number ) and the corresponding value from the array. And this loop prints a asterisks \* to represent 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:



```
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>
C:\Users\joyni\OneDrive\...
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 as 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 value. 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 through 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 algorithm 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**