

Activity No. n4.2 Sitwork	
Replace with Title	
Course Code: CPE007	Program: Computer Engineering
Course Title: Programming Logic and Design	Date Performed: 09/18/25
Section: CPE11S1	Date Submitted: 09/18/25
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6. Output	

INPUT:

```
1 #include <iostream>
2
3 using namespace std;
4
5 int main() {
6     const int size = 10;
7     int score[size] = { 95, 85, 78, 88, 92, 80, 75, 80, 89, 91 };
8
9     for (int i = 0; i < size; i++) {
10         cout << score[i] << " ";
11     }
12     cout << endl;
13
14     for (int i = 0; i < size; i++){
15         cout << "address of element " << i << ": " << &score[i] << endl;
16     }
17
18
19     int *scorePtr;
20     scorePtr = &score[3];
21     cout << *scorePtr << endl;
22     cout << scorePtr << endl;
23
24     cout<<"the address of the array[0]: "<< * scorePtr<<endl;
25     cout<<"the defereced pointer: "<<scorePtr<<endl;
26     cout<<endl<<endl;
27
28     int numbytes = sizeof(score);
29     cout<<"The number of bytes of the array is:"<<numbytes<<endl;
30     return 0;
31 }
32 }
```

OUTPUT:

```
95 85 78 88 92 80 75 80 89 91
address of element 0: 0x6ffd0
address of element 1: 0x6ffd4
address of element 2: 0x6ffd8
address of element 3: 0x6ffd0c
address of element 4: 0x6ffe00
address of element 5: 0x6ffe04
address of element 6: 0x6ffe08
address of element 7: 0x6ffe0c
address of element 8: 0x6ffe10
address of element 9: 0x6ffe14
88
0x6ffd0c
the address of the array[0]: 88
the defereced pointer: 0x6ffd0c

The number of bytes of the array is:40

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Process exited after 0.2219 seconds with return value 0
Press any key to continue . . . |
```

EXPLANATION: The C++ code in the image is a basic program that demonstrates several key concepts: arrays, loops, pointers, and memory size. Variable Declarations and Array Initialization The code starts by declaring and initializing a few variables. The `const int size = 10;` line declares a constant integer variable named `size` and sets its value to 10. This is a good practice as it makes the array size easily modifiable in one place. The next line, `int score[size] = { 95, 85, 70, 88, 92, 80, 75, 80, 89, 91 };`, declares an integer array named `score` with a size of 10. It then initializes the array with 10 specific integer values, which could represent student scores.

7. Supplementary Activity

Arrays store multiple elements of the same data type in contiguous memory. Each element in an array is stored in contiguous memory, and each element has its own distinct address operator assigned to a pointer variable of the appropriate type. To initialize pointers the primary use is to obtain the memory address of variable to initialize the pointers. Sorting addresses, in C++ language it's focus on sorting the data that the addresses point to. This is a common practice in data structures like linked lists or when working with dynamic arrays, as it allows for efficient manipulation of data without the overhead of moving the actual objects in memory.

8. Conclusion