Activity No. 4.2	
Pointers	
Course Code: CPE 007	**Program:** Computer Engineering
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6. Output

Code :

```cpp
#include<iostream>
using namespace std;

int main (){
const int size =10;
int scores[size] = {77, 95, 75, 90, 88, 97, 78, 87, 98, 90};
cout << "scores of the array : ";

for(int i = 0; i < size; i++){
    cout<< scores[i]<<" ";
}

cout << endl;
for(int i = 0; i < size; i++){
    cout << "address of element " << i <<": "<< &scores[0]<<endl;
}

int *scorePtr;
scorePtr = &scores[9];

cout<<*scorePtr<<endl;
cout<<scorePtr<<endl;

int numBytes = sizeof(scores);
cout << "The number of bytes in of the array is : " <<numBytes << endl;
return 0;

}
```

Output :

```
scores of the array : 77 95 75 90 88 97 78 87 98 90
address of element 0: 0x6ffe00
address of element 1: 0x6ffe00
address of element 2: 0x6ffe00
address of element 3: 0x6ffe00
address of element 4: 0x6ffe00
address of element 5: 0x6ffe00
address of element 6: 0x6ffe00
address of element 7: 0x6ffe00
address of element 8: 0x6ffe00
address of element 9: 0x6ffe00
90
0x6ffe24
The number of bytes in of the array is : 40

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Process exited after 1.08 seconds with return value 0
Press any key to continue . . .
```

Explanation :

- First, I wrote the array for it to have 10 elements which is **"const int size = 10;"** then I followed it by **"int scores[size] = {77, 95, 75……etc}"** for the 10 array to have value then I put **cout << "scores of the array : ";** to print it to the output, after that I used and loop for the program to run from 0-9 increasing the increment to show each value 1 by 1. Then I did the second loop to print the memory address for the first element only and I did **cout << "address of element : << i << &scores[0] << endl;** to print the label in the output. Then make a pointer to address and integer using int ***scorePtr;** and to **scorePtr = &scores[9]** to store the address of 9 in the array then **cout <<*scorePtr<<edl;** to print the value stored in **&scores[9]** then **cout <<scorePtr<<edl;** to print its address. then **int numBytes = sizeof(scores);** prints the total of bytes it took of the array then **cout << "the number of bytes in of the array is :** to print the label for the output.

7. Supplementary Activity

- In this activity 4.2 I learned more about arrays, including storing variables, use loops, use pointers and how to check their memory address. I understand it very well though it's still tricky. I still find it hard especially if I'll try to code this without reference. I will surely have a mental block out because all of this is pretty new to me. This activity helped me explore more about data and how to store it. Overall I think I did well in understanding it, but I'm still adapting and still need improvement through practice.

8. Conclusion