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## **Lab task 02**

### **QUESTION # 01 :**

```
#include <iostream>
```

```
#include <conio.h>
```

```
using namespace std;
```

```
int main() {
```

```
    int arr[10];
```

```
    cout << "Enter age of 10 users: ";
```

```
    for (int i = 0; i < 10; i++) {
```

```
        cin >> arr[i];
```

```
    }
```

```
    int maxage = arr[0];
```

```
    for (int i = 1; i < 10; i++) {
```

```
        if (arr[i] > maxage) {
```

```
            maxage = arr[i];
```

```
        }
```

```
    }
```

```
    cout << "Largest age of the student is: " << maxage << endl;
```

```
    return 0;
```

```
}
```

# OUTPUT

```
Enter age of 10 users: 13
14
15
16
17
18
19
20
21
22
Largest age of the student is: 22

=== Code Execution Successful ===
```

## Question no 2

```
#include <iostream>
```

```
#include <conio.h>
```

```
using namespace std;
```

```
int main() {
```

```
    int size;
```

```
    cout << "Enter the size of the arrays: ";
```

```
    cin >> size;
```

```
    int* arr1 = new int[size];
```

```
    int* arr2 = new int[size];
```

```
    int* arr3 = new int[size];
```

```
    int* sum_arr = new int[size];
```

```
    cout << "Enter elements for the first array: ";
```

```
    for (int i = 0; i < size; i++) {
```

```
        cin >> arr1[i];
```

```
    }
```

```

    cout << "Enter elements for the second array: ";
    for (int i = 0; i < size; i++) {
        cin >> arr2[i];
    }
    cout << "Enter elements for the third array: ";
    for (int i = 0; i < size; i++) {
        cin >> arr3[i];
    }

    // Add the arrays and store the result in sum_arr
    for (int i = 0; i < size; i++) {
        sum_arr[i] = arr1[i] + arr2[i] + arr3[i];
    }
    cout << "Sum array: ";
    for (int i = 0; i < size; i++) {
        cout << sum_arr[i] << " ";
    }
    cout << endl;

    // Deallocate memory
    delete[] arr1;
    delete[] arr2;
    delete[] arr3;
    delete[] sum_arr;

    return 0;
}

```

Output:

```
Enter age of 10 users: 13
14
15
16
17
18
19
20
21
22
Largest age of the student is: 22

=== Code Execution Successful ===
```

## Question # 03

```
#include <iostream>
```

```
#include <conio.h>
```

```
using namespace std;
```

```
int main() {
```

```
    int size;
```

```
    cout << "Enter the size of the array: ";
```

```
    cin >> size;
```

```
    int* arr = new int[size];
```

```
    cout << "Enter elements for the array: ";
```

```
    for (int i = 0; i < size; i++) {
```

```
        cin >> arr[i];
```

```
    }
```

```
int item;

cout << "Enter the item to search: ";

cin >> item;

int found = 0;

for (int i = 0; i < size; i++) {

    if (arr[i] == item) {

        cout << "Item found at index " << i << endl;

        found = 1;

        break;

    }

}

return 0;

}
```

## Output:

```
Enter the size of the array: 1
Enter elements for the array: 2
Enter the item to search: 2
Item found at index 0

=== Code Execution Successful ===|
```