LAB TASK # 02

CODE # 01:

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

int main() {
    int Students = 10;
    int ages[Students];
    int largestAge = 0;

    for (int i = 0; i < Students; i++) {
        cout << "Enter the age of student " << i + 1 << ": ";
        cin >> ages[i];
    }

    for (int i = 0; i < Students; i++) {
        if (ages[i] > largestAge) {
            largestAge = ages[i];
        }
    }

    cout<<endl;
    cout << "The largest age among the students is: " << largestAge << endl;

    return 0;
}
```

CODE # 02:

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

int main() {
   int size;

   cout << "Enter the size of each array: ";
   cin >> size;

   int *arr1 = new int[size];
   int *arr2 = new int[size];
   int *arr3 = new int[size];
   int *result = new int[size];

   cout << "Enter elements for the first array:\n";
   for (int i = 0; i < size; i++) {
      cout << "Element " << i + 1 << ": ";
      cin >> arr1[i];
   }

   cout << "Enter elements for the second array:\n";
   for (int i = 0; i < size; i++) {
      cout << "Element " << i + 1 << ": ";
      cin >> arr2[i];
   }

   cout << "Enter elements for the third array:\n";
   for (int i = 0; i < size; i++) {
      cout << "Element " << i + 1 << ": ";
```

```
        cin >> arr3[i];
    }

    for (int i = 0; i < size; i++) {
        result[i] = arr1[i] + arr2[i] + arr3[i];
    }

    cout << "Result of adding the three arrays:\n";
    for (int i = 0; i < size; i++) {
        cout << "Element " << i + 1 << ": " << result[i] << endl;
    }

    delete[] arr1;
    delete[] arr2;
    delete[] arr3;
    delete[] result;

    return 0;
}
```

CODE # 03:

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

int main() {
    int size, item, index = -1;

    cout << "Enter size of the array: ";
    cin >> size;

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

```
    cout << "Enter elements of the array:\n";
    for (int i = 0; i < size; ++i) {
        cout << "Element " << i + 1 << ": ";
        cin >> arr[i];
    }

    cout << "Enter the item to search for: ";
    cin >> item;

    for (int i = 0; i < size; ++i) {
        if (arr[i] == item) {
            index = i;
            break;
        }
    }

    if (index != -1) {
        cout << "Item found at index " << index << " (position " << index + 1 << ")." << endl;
    } else {
        cout << "Item not found in the array." << endl;
    }

    delete[] arr;

    return 0;
}
```