



**Al-Mustaqbal University**  
**College of Sciences**  
**Intelligent Medical System Department**

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جامعة المستقبل  
AL MUSTAQBAL UNIVERSITY

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**قسم الانظمة الطبية الذكية**

## **Lecture: (2)** **one-dimensional array part2**

**Subject: Computer Programming**

**Class: One**

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## one-dimensional array

**write program in java to Find the Maximum Element**

```
public class lec11array1 {
    public static void main(String[] args) {
        // TODO Auto-generated method stub
        int[] arr = {15, 42, 7, 89, 23};

        // Assume the first element is the maximum
        int max = arr[0];

        // Iterate through the array to compare elements
        for (int i = 1; i < arr.length; i++) {
            if (arr[i] > max) {
                max = arr[i]; // Update max if a larger element is found
            }
        }

        System.out.println("The maximum element is: " + max);
    }
}
```

**Output:**

The maximum element is: 89

## one-dimensional array

**write programmer in java to Search for an element:**

```
public class lec11array1 {
    public static void main(String[] args) {
        // TODO Auto-generated method stub
        int[] arr = {10, 20, 30, 40, 50};
        int target = 30; // Element to find
        int index = -1; // Initialize with -1 (not found)

        // Loop through the array
        for (int i = 0; i < arr.length; i++) {
            if (arr[i] == target) {
                index = i; // Save the position
                break; // Exit loop once found
            }
        }

        if (index != -1) {
            System.out.println("Element " + target + " found at index: " +
index);
        }
    }
}
```



```
    } else {  
        System.out.println("Element " + target + " not found.");  
    }  
}  
}
```

### **Output:**

Element 30 found at index: 2

### **Write programm in java to find sum elements**

```
// Defining the array  
  
int[] array = {1, 2, 3, 4, 5};  
  
// Calculating the sum of array elements  
  
int sum = 0;  
  
for (int i = 0; i < array.length; i++) {  
    sum += array[i];  
}  
  
System.out.println("Sum of array elements: " + sum);
```

### **Output:**

Sum of array elements: 15

### **Write program in java to sort elements**

```
/ Defining the array  
  
int[] array = {5, 2, 7, 1, 3};  
  
// Sorting the array using Bubble Sort  
  
for (int i = 0; i < array.length - 1; i++) {
```



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```
for (int j = 0; j < array.length - 1 - i; j++) {  
    if (array[j] > array[j + 1]) {  
        int temp = array[j];  
        array[j] = array[j + 1];  
        array[j + 1] = temp;  
    }  
}  
  
System.out.println("Sorted array:");  
  
for (int i = 0; i < array.length; i++) {  
    System.out.print(array[i] + " ");  
}  
  
}
```

**Output:**

```
Sorted array:  
1 2 3 5 7
```