

Array

```
int[] myInts = new int[]{1,2,3,4};
```

Characteristic

- Size unchangable
- Primitive objects only

Types

- Single Dimensional (1D) Array



- Two Dimensional (2D) Array



- Multidimensional Array



Method

- .length
- Selection Sort (to sort from smallest to largest)

```
class SelectionSort{
    public void SelectionSort(int arr[]){
        int n = arr.length;
        for(int i = 0; i<n-1; i++){
            int min_idx = i;
            for(int j = i+1; j<n; j++){
                if(arr[j] < arr[min_idx])
                    min_idx = j;
            }
            int temp = arr[min_idx];
            arr[min_idx] = arr[i];
            arr[i] = temp;
        }
    }
}
```

ArrayList

```
ArrayList<T> lst = new ArrayList<T>();
```

Characteristic

- Must use "import java.util.ArrayList"
- Size changable
- Can store pretty much anything
- For more, use "import java.util.Arrays"

Method

.add(x)	.get(index)	.clear()
	.size()	.remove(index)
.set(index, x)		.indexOf(x)

ArrayList to Array vice versa

Array to ArrayList

```
String[] arr = new String[]{"H", "E", "I"};
ArrayList<String> lst = new ArrayList<String>(Arrays.asList(arr));
```

ArrayList to Array

```
String[] arr = new String[]{"H", "E", "I"};
ArrayList<String> lst = new ArrayList<String>(Arrays.asList(arr));
String[] arrNew = new String[lst.size()];
lst.toArray(arrNew);
System.out.println(Arrays.toString(arrNew));
```



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