

# Arrays

# Arrays initialization (1)

```
int[] arr = new int[5];  
arr[0] = 5;  
arr[1] = 5;  
arr[2] = 5;  
arr[3] = 5;  
arr[4] = 5;
```

# Arrays initialization (2)

```
int[] arr = new int[5];  
for (int i = 0; i < arr.length; i++)  
    arr[i] = 5;
```

# Arrays initialization (3)

```
int[] arr = { 5, 5, 5, 5, 5 };
```

# Arrays initialization (3)

```
int[] arr = new int[5];  
Arrays.fill(arr, 5);
```

# Arrays Class

- `Arrays.fill`
- `Arrays.copyOf` & `Arrays.copyOfRange`
- `Arrays.setAll` (JDK 8, in the future)
- `Arrays.equals`
- `Arrays.sort`
- `Arrays.binarySearch`
- `Arrays.toString`

# fill

```
int[] arr = new int[5];  
Arrays.fill(arr, 5);
```

# copyOf & copyOfRange

```
int[] original = { 1, 2, 3, 4, 5 };  
int[] copy = Arrays.copyOf(original, original.length);  
int[] copyExtended = Arrays.copyOf(original, original.length * 2);  
int[] copyOfARange = Arrays.copyOfRange(original, 0, 2);
```



# equals

```
int[] arr1 = { 1, 2, 3, 4, 5 };  
int[] arr2 = Arrays.copyOf(arr1, arr1.length);  
int[] arr3 = { 5, 4, 3, 2, 1 };  
System.out.println(Arrays.equals(arr1, arr2)); //true  
System.out.println(Arrays.equals(arr1, arr3)); //false
```

# sort & binarySearch & toString

```
int[] arr1 = { 4, 3, 5, 1, 2 };  
Arrays.sort(arr1);  
System.out.println(Arrays.toString(arr1));  
System.out.println(Arrays.binarySearch(arr1, 3));
```

```
//Output:  
//[1, 2, 3, 4, 5]  
//2
```