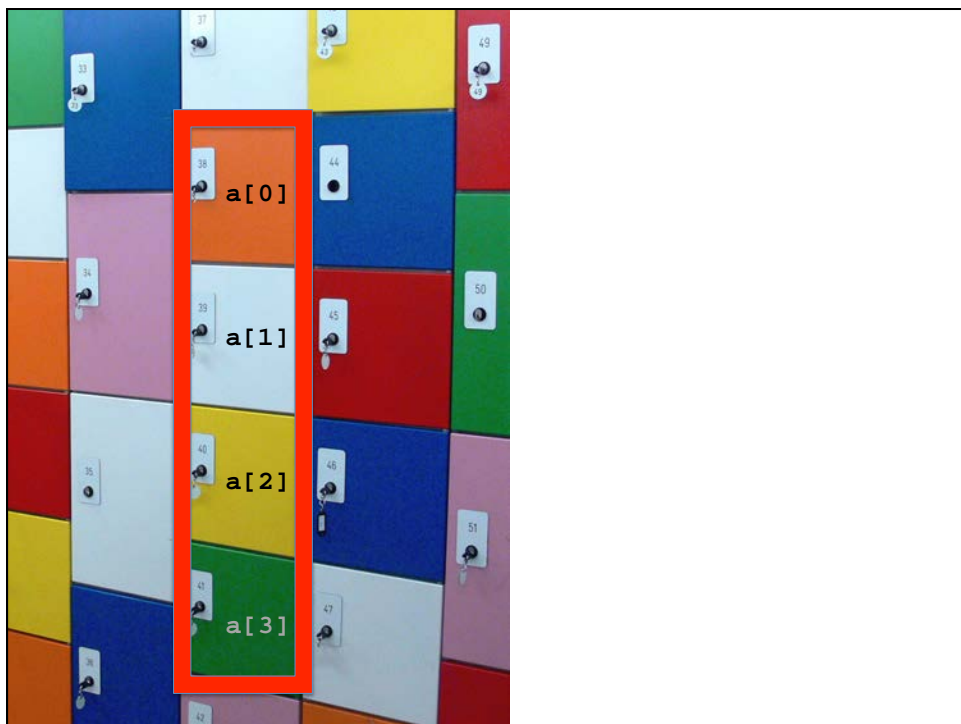


ARRAYS





Arrays

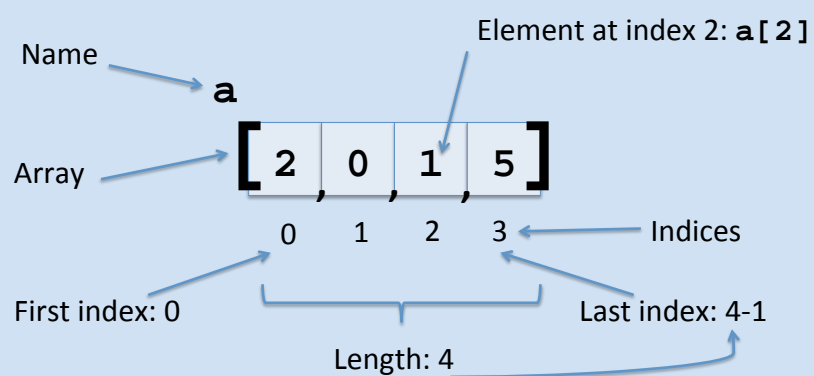
```
[1, 3, 5, 7, 9]
```

```
[2, 0, 1, 5]
```

```
[true, false, true]
```

```
[]
```

Arrays



Declaration

```
byte[] anArrayOfBytes;  
short[] anArrayOfShorts;  
int[] anArrayOfInts;  
long[] anArrayOfLongs;  
float[] anArrayOfFloats;  
double[] anArrayOfDoubles;  
boolean[] anArrayOfBooleans;  
char[] anArrayOfChars;  
String[] anArrayOfStrings;
```

Creation

Creation

```
a = new int[4];
```

Declaration and Creation

```
int[] a = new int[4];
```

Access

a[0]

First element in the array

a[4]

Error: the array has been
declared of length 4.

Indices go from 0 to 3.

Initialization

- Assignment one by one

```
a[0] = 2;
```

```
a[1] = 0;
```

```
a[2] = 1;
```

```
a[3] = 2*a[0]+a[2];
```

- Declaration, creation
and initialization

```
int[] a = {2, 0, 1, 5};
```

Strings and Arrays of Characters

```
['2', '0', '1', '5']
```

```
"2015"
```

2-Dimensional Arrays

- ```
[[], [3], [5,6]]
```
- ```
[[1,2], [3,4], [5,6]]
```
- ```
[[1,2],
 [3,4],
 [5,6]]
```

## Conclusion

- Length fixed at creation
- All elements of the same type
- The elements might be arrays