

# Array

Holds a fixed-length list of elements

Simpler syntax, faster computation, less flexible

```
String [] names = {"Bob", "Tom", "Mary", "Jane"};
```

Elements accessed with brackets, [index]

```
names[i];
```

Elements set with assignment operator =

```
names[0] = "Bob";
```

Length is accessed using .length variable

```
names.length;
```

# ArrayList

Holds a variable-length list of elements

Complex syntax, slower computation, more flexible

```
ArrayList<String> names = new ArrayList<String>();
```

Elements accessed with .get(index) function

```
names.get(i);
```

Elements set with set(index, value) function

```
names.set(0, "Bob");
```

Length is accessed using .size() function

```
names.size();
```

Additional abilities:

```
names.add("Bob"); (add to end)
```

```
names.remove("Bob"); (remove this value)
```

```
names.clear(); (remove all)
```