

# Arrays

**Arrays** are **data structures** which allow more than one data item to be stored in a single variable

In Python they are implemented using lists



# Arrays

One variable name

Array shown by [ ]

Items separated by ,

```
fruitArray <- ["apples", "oranges", "bananas"]
```

# Arrays

Arrays have a length

Arrays are **indexed** - usually starting from 0

```
fruitArray <- ["apples", "oranges", "bananas"]
```

LEN(fruitArray) is ??????

# Arrays

```
fruitArray <- ["apples", "oranges", "bananas"]
```

fruitArray[0] is ??????

fruitArray[1] is ??????

# Arrays

```
binArray <- [1, 2, 4, 8, 16, 32, 64, 128, 256]
```

LEN(binArray) is ?????

binArray[2] is ?????

binArray[4] is ?????

binArray[8] is ?????

binArray[9] is ?????

# Arrays

```
emptyArray <- []
```

LEN(emptyArray) is ??????

emptyArray[0] is ??????

