# Python Lists

# Python Collections (Arrays)

There are four collection data types in the Python programming language:

- **List** is a collection which is ordered and changeable. Allows duplicate members.
- **Tuple** is a collection which is ordered and unchangeable. Allows duplicate members.
- **Dictionary** is a collection which is unordered, changeable and indexed. No duplicate members.

When choosing a collection type, it is useful to understand the properties of that type. Choosing the right type for a particular data set could mean retention of meaning, and, it could mean an increase in efficiency or security.

#### List

A list is a collection which is ordered and changeable. In Python lists are written with square brackets.

```
Example
Create a List:
thislist = ["apple", "banana", "cherry"]
print(thislist)
```

#### **Access Items**

You access the list items by referring to the index number:

## Example

Print the second item of the list:

```
thislist = ["apple", "banana", "cherry"]
print(thislist[1])
```

# **Negative Indexing**

Negative indexing means beginning from the end, -1 refers to the last item, -2 refers to the second last item etc.

### Example

Print the last item of the list:

```
thislist = ["apple", "banana", "cherry"]
print(thislist[-1])
```