

Lists in Python



Outlines

- Lists
- Append method
- Insert method
- Join two lists
- Length of lists
- Specify item in the list
- Exercise

Lists

Lists are used to store multiple items in a single variable. Lists are created using square brackets(i.e. []).

In [5]:

```
item = ['banana','apple','cherry']  
item
```

Out[5]:

```
['banana', 'apple', 'cherry']
```

item

0	banana
1	apple
2	cherry

In [2]:

```
# access the last character 'cherry'  
item[2]
```

Out[2]:

'cherry'

In [7]:

```
# access the last element with negative index  
item[-1]
```

Out[7]:

'cherry'

In [8]:

```
item[-3]
```

Out[8]:

'banana'

In [9]:

```
# Strings are mutable  
# change 'bannana' into 'orange'  
item[0]='orange'  
item
```

Out[9]:

['orange', 'apple', 'cherry']

Append method

In [10]:

```
# insert 'pasta' as the last element in the list  
item.append('pasta')  
item
```

Out[10]:

['orange', 'apple', 'cherry', 'pasta']

Insert method

In [12]:

```
# insert 'bread' as the second element in the list  
item.insert(1, 'bread')  
item
```

Out[12]:

```
['orange', 'bread', 'apple', 'cherry', 'pasta']
```

Join two lists

In [14]:

```
l1 = ['bread', 'pasta', 'fruits']  
l2 = ['soap', 'shampo']  
l = l1 + l2  
l
```

Out[14]:

```
['bread', 'pasta', 'fruits', 'soap', 'shampo']
```

Length of list

In [16]:

```
len(item)
```

Out[16]:

```
5
```

Specify item in the list

In [17]:

```
'bread' in item
```

Out[17]:

```
True
```

In [18]:

```
'book' in item
```

Out[18]:

```
False
```

Exercise:

You have a list of your favourite movies.

```
movies=['shawshank redemption','cinema paradiso','cast away','seven pounds','passenger']
```

Using this find out,

1. Length of the list.
 2. Add 'persuit of happiness' at the end of this list.
 3. Remove 'persuit of happiness' from the end and add it after 'cast away'.
 4. Remove 'cinema paradiso' and 'cast away' and replace them with 'dark night'.
- Do that with one line of code.
5. Sort the movies list in alphabetical order.

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[Click here for solution part 2](#)

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