

9- Lists

March 6, 2023

```
[1]: #Creating a list
myfruit = ["fig", "apple", "banana", "fig", "apple"]
print(myfruit)
```

['fig', 'apple', 'banana', 'fig', 'apple']

```
[2]: #number of items
print(len(myfruit))
```

5

```
[3]: mynumbers = [1, 2, 3, 4, 5]
myboolean = [True, False, False]
print(mynumbers)
print(myboolean)
```

[1, 2, 3, 4, 5]

[True, False, False]

```
[5]: mixed_list = [2, "abc", 3.5, True, "Hi"]
print(mixed_list)
```

[2, 'abc', 3.5, True, 'Hi']

```
[6]: print(type(mixed_list))
```

<class 'list'>

```
[7]: type(mixed_list)
```

```
[7]: list
```

```
[9]: fruits_list = list(("banana", "cherry", "lemon"))
```

```
[10]: type(fruits_list)
```

```
[10]: list
```

```
[12]: print(fruits_list[0])
print(fruits_list[1])
```

banana
cherry

```
[13]: print(fruits_list[-1])
```

lemon

```
[14]: print(fruits_list[0:2])
```

['banana', 'cherry']

```
[15]: print(fruits_list[1:])
```

['cherry', 'lemon']

```
[16]: if "banana" in fruits_list:  
      print("banana is in the list!")
```

banana is in the list!

```
[17]: if "fig" in fruits_list:  
      print("fig is in the list!")  
      else:  
          print("not in the list!")
```

not in the list!

```
[19]: fruits_list[1] = "Apple"  
      print(fruits_list)
```

['banana', 'Apple', 'lemon']

```
[20]: fruits_list[0] = ["fig", 'watermelon']  
      print(fruits_list)
```

[['fig', 'watermelon'], 'Apple', 'lemon']

```
[21]: #insert to specific place  
      fruits_list.insert(1,"banana")
```

```
[22]: fruits_list
```

```
[22]: [['fig', 'watermelon'], 'banana', 'Apple', 'lemon']
```

```
[23]: #append: adds to the end of the list  
      fruits = ["fig", "apple", "watermelon"]  
      fruits.append("orange")  
      print(fruits)
```

['fig', 'apple', 'watermelon', 'orange']

```
[24]: #add a list to the end of another list
fruits2 = ["lemon", "cherry"]
```

```
fruits.extend(fruits2)
print(fruits)
```

```
['fig', 'apple', 'watermelon', 'orange', 'lemon', 'cherry']
```

```
[25]: #remove
fruits.remove("watermelon")
print(fruits)
```

```
['fig', 'apple', 'orange', 'lemon', 'cherry']
```

```
[26]: #remove by index default is the last item
fruits.pop(1)
print(fruits)
```

```
['fig', 'orange', 'lemon', 'cherry']
```

```
[27]: fruits.pop()
```

```
[27]: 'cherry'
```

```
[28]: print(fruits)
```

```
['fig', 'orange', 'lemon']
```

```
[29]: del fruits[0]
print(fruits)
```

```
['orange', 'lemon']
```

```
[30]: #del entire list
del fruits
```

```
[31]: fruits
```

```
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NameError                                Traceback (most recent call last)
/var/folders/6t/xy3pcrwn7r50cmfvm_58m4xm0000gn/T/ipykernel_3037/925828544.py in
↳<module>
----> 1 fruits

NameError: name 'fruits' is not defined
```

```
[32]: #empty the list
fruits = ["fig", "apple", "watermelon"]
fruits.clear()
```

```
[33]: fruits
```

```
[33]: []
```

```
[ ]:
```