

11-sets

March 6, 2023

1 Creating a set

```
[1]: fruit_set = {"fig", "banana", "lemon"}  
     print(fruit_set)
```

```
{'banana', 'fig', 'lemon'}
```

```
[2]: type(fruit_set)
```

```
[2]: set
```

```
[3]: len(fruit_set)
```

```
[3]: 3
```

```
[4]: set1 = {"banana", "cherry", "apple"}  
     set2 = {1, 2, 3}  
     set3 = {True, False, True}  
  
     print(set1)  
     print(set2)  
     print(set3)
```

```
{'cherry', 'apple', 'banana'}  
{1, 2, 3}  
{False, True}
```

```
[5]: newset = { "hi", True, 4}  
     print(newset)
```

```
{True, 4, 'hi'}
```

```
[6]: #another way of creating a set  
     fruit_set= set(("banana", "appale", "fig"))  
     print(fruit_set)
```

```
{'appale', 'banana', 'fig'}
```

```
[7]: #access items  
     #you can not access by a key or index
```

```
for item in fruit_set:
    print(item)
```

appale
banana
fig

```
[9]: print("banana" in fruit_set)
```

True

```
[10]: fruit_set.add("orange")
fruit_set
```

```
[10]: {'appale', 'banana', 'fig', 'orange'}
```

```
[11]: #add multiple objects
fruit_set.update(["lemon", "cherry"])
print(fruit_set)
```

```
{'cherry', 'appale', 'orange', 'banana', 'fig', 'lemon'}
```

```
[12]: #removing item
fruit_set.remove("orange")
print(fruit_set)
```

```
{'cherry', 'appale', 'banana', 'fig', 'lemon'}
```

```
[15]: #another method for removing
#if cherry does not exists, it does not show any error
fruit_set.discard("cherry")
print(fruit_set)
```

```
{'appale', 'banana', 'fig', 'lemon'}
```

```
[16]: #you dont know which item is going to be removed
x = fruit_set.pop()
print(x)
print(fruit_set)
```

appale
{'banana', 'fig', 'lemon'}

```
[17]: #empty the set
fruit_set.clear()
print(fruit_set)
```

set()

```
[18]: #delete the set completely
```

```
del fruit_set  
print(fruit_set)
```

```
-----  
NameError                                Traceback (most recent call last)  
/var/folders/6t/xy3pcrwn7r50cmfvm_58m4xm0000gn/T/ipykernel_3399/1598517439.py i  
↳<module>  
    2  
    3 del fruit_set  
----> 4 print(fruit_set)  
  
NameError: name 'fruit_set' is not defined
```

```
[ ]:
```