sets

February 6, 2023

[1]:
```
s = {}
```

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

[2]:
```
dict
```

[3]:
```
s1 = {1,2,3,4,5}
```

[4]:
```
type(s1)
```

[4]:
```
set
```

[5]:
```
s2 = {1,1,12,3,3,3,4,5,5,5,55,523,34,3,45,6,67}
```

[6]:
```
s2
```

[6]:
```
{1, 3, 4, 5, 6, 12, 34, 45, 55, 67, 523}
```

[9]:
```
l = list(s2)
```

[8]:
```
tuple(s2)
```

[8]:
```
(1, 34, 3, 4, 5, 6, 67, 523, 12, 45, 55)
```

[10]:
```
l
```

[10]:
```
[1, 34, 3, 4, 5, 6, 67, 523, 12, 45, 55]
```

[11]:
```
set(l)
```

[11]:
```
{1, 3, 4, 5, 6, 12, 34, 45, 55, 67, 523}
```

[12]:
```
s4 = {1,2,3,4,[1,2,3,4]}
```

```
---------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
Cell In[12], line 1
----> 1 s4 = {1,2,3,4,[1,2,3,4]}
```

```
TypeError: unhashable type: 'list'
```

[13]:
```
s5 = {1,2,3,4, (1,2,3,4)}
```

[14]:
```
s5
```

[14]:
```
{(1, 2, 3, 4), 1, 2, 3, 4}
```

[15]:
```
s6 = {"sudh" , "Sudh" , 2,3,4,5}
```

[16]:
```
s6
```

[16]:
```
{2, 3, 4, 5, 'Sudh', 'sudh'}
```

[17]:
```
s7  = {"sudh" , "sudh" , 2,3,4,5}
```

[18]:
```
s7
```

[18]:
```
{2, 3, 4, 5, 'sudh'}
```

[19]:
```
s7
```

[19]:
```
{2, 3, 4, 5, 'sudh'}
```

[20]:
```
s7[0]
```

```
---------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
Cell In[20], line 1
----> 1 s7[0]

TypeError: 'set' object is not subscriptable
```

[21]:
```
s7[::-1]
```

```
---------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
Cell In[21], line 1
----> 1 s7[::-1]

TypeError: 'set' object is not subscriptable
```

[22]:
```
s7
```

[22]: {2, 3, 4, 5, 'sudh'}

[23]:
```
for i in s7 :
    print(i)
```

```
2
3
4
5
sudh
```

[24]:
```
s7
```

[24]: {2, 3, 4, 5, 'sudh'}

[25]:
```
s7.add(34)
```

[26]:
```
s7
```

[26]: {2, 3, 34, 4, 5, 'sudh'}

[27]:
```
s7.add(2)
```

[28]:
```
s7
```

[28]: {2, 3, 34, 4, 5, 'sudh'}

[29]:
```
len(s7)
```

[29]: 6

[30]:
```
s7.pop()
```

[30]: 2

[31]:
```
s7
```

[31]: {3, 34, 4, 5, 'sudh'}

[32]:
```
s7.pop()
```

[32]: 3

[33]:
```
s7.pop()
```

[33]: 4

[34]:
```
s7.pop()
```

[34]: 5

[35]:
```
s7
```

[35]: {34, 'sudh'}

[36]:
```
s7
```

[36]: {34, 'sudh'}

[37]:
```
s7.clear()
```

[38]:
```
s7
```

[38]: set()

[39]:
```
s8 = {1,2,3,4}
s9 = {1,2,3,5}
```

[40]:
```
s8.difference(s9)
```

[40]: {4}

[41]:
```
s9.difference(s8)
```

[41]: {5}

[ ]:
```

```