DATA TYPES

In [1]:
```
type(-12+100)
```

Out[1]:
```
int
```

In [2]:
```
type(-12+10.25)
```

Out[2]:
```
float
```

In [3]:
```
# Only j will work as imaginary number
type(12+3j)
```

Out[3]:
```
complex
```

In [9]:
```
# Boolean

type(True)
```

Out[9]:
```
bool
```

In [10]:
```
# Strings

'Single Quote'
```

Out[10]:
```
'Single Quote'
```

In [11]:
```
"Double quote"
```

Out[11]:
```
'Double quote'
```

In [13]:
```
multiline = """
The ice cream vanquished
my longing for sweets,
upon this diet I look away,
it no longer exists on this day.
"""
print(multiline)
```

```
The ice cream vanquished
my longing for sweets,
upon this diet I look away,
it no longer exists on this day.
```

In [14]:
```
a = 'Hello World!'

print(a[:5])
```

```
Hello
```

In [15]:
```
a = 'Hello World!'

print(a[6])
```

```
W
```

In [16]:
```
a = 'Hello World!'

print(a[-3])
```

```
l
```

In [17]:
```
a = 'Hello World!'

print(a[2:5])
```

```
llo
```

In [18]:
```
a*3
```

Out[18]:
```
'Hello World!Hello World!Hello World!'
```

In [19]:
```
a+a
```

Out[19]:
```
'Hello World!Hello World!'
```

In [20]:
```
# List

[1,2,3]
```

Out[20]:
```
[1, 2, 3]
```

In [21]:
```
['Cookie Dough','Strawberry','Chocolate']
```

Out[21]:
```
['Cookie Dough', 'Strawberry', 'Chocolate']
```

In [22]:
```
['Vanilla', 3, ['Scoops', 'Spoon'],True]
```

Out[22]:
```
['Vanilla', 3, ['Scoops', 'Spoon'], True]
```

In [25]:
```
ice_cream = ['Cookie Dough','Strawberry','Chocolate']

ice_cream.append('Salted Caramel')

ice_cream
```

Out[25]: ['Cookie Dough', 'Strawberry', 'Chocolate', 'Salted Caramel']

In [26]:
```
ice_cream[0] = 'Butter Pecan'

ice_cream
```

Out[26]: ['Butter Pecan', 'Strawberry', 'Chocolate', 'Salted Caramel']

In [27]:
```
nest_list = ['Vanilla', 3, ['Scoops', 'Spoon'],True]

nest_list[0]
```

Out[27]: 'Vanilla'

In [29]:
```
nest_list[2]
```

Out[29]: ['Scoops', 'Spoon']

In [30]:
```
nest_list[2][1]
```

Out[30]: 'Spoon'

In [31]:
```
# tuple (Can not be changed once created )

tuple_scoops = (1,2,3,2,1)

tuple_scoops
```

Out[31]: (1, 2, 3, 2, 1)

In [34]:
```
# Sets (Can't have duplicates and can't be indexed)

daily_pints = {1,2,3}

print(daily_pints)

daily_pints_log = {1,2,31,2,3,4,1,2,5,6,3,2}

print(daily_pints_log)
```

```
{1, 2, 3}
{1, 2, 3, 4, 5, 6, 31}
```

In [36]:
```
wifes_daily_pints_log = {1,3,5,7,3,24,5,7,3,2,0}
```

In [37]:
```
# compares the two sets and prints the unique value of both sets
print(daily_pints_log | wifes_daily_pints_log)
```

```
{0, 1, 2, 3, 4, 5, 6, 7, 24, 31}
```

In [38]:
```
# Matches the two sets and prints the value occuring in both sets
print(daily_pints_log & wifes_daily_pints_log)
```

```
{1, 2, 3, 5}
```

In [39]:
```
# Values that dosent match and prints the remaining value of the first set in t
print(daily_pints_log - wifes_daily_pints_log)
```

```
{4, 6, 31}
```

In [40]:
```
# prints the unique value of both sets that are not in either of them
print(daily_pints_log ^ wifes_daily_pints_log)
```

```
{0, 4, 6, 7, 24, 31}
```

In [41]:
```
# dictionaries
#Key/Value Pair

dict_cream = {'name': 'Akshay Koul', 'weekly intake': 5, 'favorite ice creams'

print(dict_cream)
```

```
{'name': 'Akshay Koul', 'weekly intake': 5, 'favorite ice creams': ['MCC', 'C
hocolate']}
```

In [42]:
```
dict_cream.values()
```

Out[42]:
```
dict_values(['Akshay Koul', 5, ['MCC', 'Chocolate']])
```

In [43]:
```
dict_cream.keys()
```

Out[43]:
```
dict_keys(['name', 'weekly intake', 'favorite ice creams'])
```

In [44]:
```
dict_cream.items()
```

Out[44]:
```
dict_items([('name', 'Akshay Koul'), ('weekly intake', 5), ('favorite ice cre
ams', ['MCC', 'Chocolate'])])
```

In [45]:
```
dict_cream['name']
```

Out[45]:
```
'Akshay Koul'
```

In [46]:
```
dict_cream['name'] = 'Saiba Koul'

print(dict_cream)
```

```
{'name': 'Saiba Koul', 'weekly intake': 5, 'favorite ice creams': ['MCC', 'Ch
ocolate']}
```

In [48]:
```
dict_cream.update({'name': 'Saiba Koul', 'weekly intake': 10, 'weight': 300})
print(dict_cream)
```

```
{'name': 'Saiba Koul', 'weekly intake': 10, 'favorite ice creams': ['MCC', 'C
hocolate'], 'weight': 300}
```

In [49]:
```
del dict_cream['weight']
print(dict_cream)
```

```
{'name': 'Saiba Koul', 'weekly intake': 10, 'favorite ice creams': ['MCC', 'C
hocolate']}
```