

```
In [1]: #if statement
age=int(input("enter your age"))

if age >=18:
    print("you are an adult")
else:
    print("you are a kid")

enter your age23
you are an adult
```

```
In [2]: # elif
```

```
In [4]: marks=int(input("enter the marks"))
if marks>=90:
    print("grade a")
elif marks>=70:
    print("grade b")
elif marks>=60:
    print("grade c")
elif marks <60:
    print("grade d")

enter the marks78
grade b
```

```
In [5]: #List
```

```
In [6]: numbers=[1,2,3,4,5]
print(numbers[2])

3
```

```
In [8]: ab=[]
print(ab)

[]
```

```
In [9]: a=[1,1,1,1,1]
b=[2,2,2,2,2]
a[2]=3
```

```
In [10]: print(a)

[1, 1, 3, 1, 1]
```

```
In [11]: print(a^2)

[1, 1, 3, 1, 1, 1, 1, 1, 3, 1, 1]
```

```
In [14]: fruits=['apple','mango','banana']
print('orange' not in fruits)

True
```

```
In [15]: #functions of list
```

```
In [16]: fruits=['apple','banana','ornge','pime']
print(fruits.append('ku'))

None
```

```
In [17]: fruits.append('kiwi')
```

```
In [18]: fruits
```

```
Out[18]: ['apple', 'banana', 'ornge', 'pime', 'ku', 'kiwi']
```

```
In [19]: print(len(fruits))

6
```

```
In [20]: print(fruits.index('kiwi'))

5
```

```
In [21]: fruits.insert(1,'anu')
```

```
In [22]: print(fruits)

['apple', 'anu', 'banana', 'ornge', 'pime', 'ku', 'kiwi']
```

```
In [23]: fruits.append('anu')
```

```
In [24]: fruits
```

```
Out[24]: ['apple', 'anu', 'banana', 'ornge', 'pime', 'ku', 'kiwi', 'anu']
```

```
In [25]: fruits.index('anu')
```

```
Out[25]: 1
```

```
In [26]: #range
```

```
In [29]: numbers=list(range(0,20,2))
```

```
In [30]: numbers
```

```
Out[30]: [0, 2, 4, 6, 8, 10, 12, 14, 16, 18]
```

```
In [35]: numbers=list(range(10))
num=list(reversed(numbers))
num
```

```
Out[35]: [9, 8, 7, 6, 5, 4, 3, 2, 1, 0]
```

```
In [32]: #code reuse
```

```
In [33]: def function1():
    print('a')
    print('b')
    print('c')
    function1()

a
b
c
```

```
In [36]: #for loop
```

```
In [37]: fruits=['apple','banana','ornage','king']
for i in fruits:
    print(i)

apple
banana
ornage
king
```

```
In [39]: for i in range(1,10):
    print("sonu")

sonu
sonu
sonu
sonu
sonu
sonu
sonu
sonu
```

```
In [40]: for i in range(0,21,2):
    print(i)

0
2
4
6
8
10
12
14
16
18
20
```

```
In [41]: #boolean logics
```

```
In [48]: user="abhii"
password='sonu'

if user=='abhi' and password=="sonu":
    print('valid user')
else:
    print("invalid user")

invalid user
```

```
In [49]: #while
```

```
In [54]: counter=0
while (counter<=10):

    print(counter)
    counter+=1

0
1
2
3
4
5
6
7
8
9
10
```

```
In [55]: pip install coronavirus

Collecting coronavirus
  Downloading coronavirus-1.1.0-py3-none-any.whl (4.6 kB)
Collecting aiohttp>=3.0.0
  Downloading aiohttp-3.6.2-cp36-cp36m-macosx_10_13_x86_64.whl (646 kB)
    | 646 kB 606 KB/s eta 0:00:01
Requirement already satisfied: chardet<4.0,>=2.0 in ./Downloads/anaconda3/lib/python3.6/site-packages (from aiohttp>=3.0.0->coronavirus) (3.0.4)
Requirement already satisfied: attrs>=17.3.0 in ./Downloads/anaconda3/lib/python3.6/site-packages (from aiohttp>=3.0.0->coronavirus) (19.3.0)
Collecting multidict<5.0,>=4.5
  Downloading multidict-4.7.5-cp36-cp36m-macosx_10_13_x86_64.whl (48 kB)
    | 48 kB 426 KB/s eta 0:00:01
Collecting async-timeout<4.0,>=3.0
  Downloading async_timeout-3.0.1-py3-none-any.whl (8.2 kB)
Collecting idna-ssl>=1.0; python_version < "3.7"
  Downloading idna-ssl-1.1.0.tar.gz (3.4 kB)
Collecting yarl<2.0,>=1.0
  Downloading yarl-1.4.2-cp36-cp36m-macosx_10_13_x86_64.whl (127 kB)
    | 127 kB 755 KB/s eta 0:00:01
Collecting typing-extensions>=3.6.5; python_version < "3.7"
  Downloading typing_extensions-3.7.4.1-py3-none-any.whl (20 kB)
Requirement already satisfied: idna>=2.0 in ./Downloads/anaconda3/lib/python3.6/site-packages (from idna-ssl>=1.0; python_version < "3.7"->aiohttp>=3.0.0->coronavirus) (2.8)
Building wheels for collected packages: idna-ssl
  Building wheel for idna-ssl (setup.py) ... done
  Created wheel for idna-ssl: filename=idna_ssl-1.1.0-py3-none-any.whl size=3161 sha256=05e37718766c4e17813f796084096fd3f38ee427494c4864092413f063b6fcb
    Stored in directory: /Users/abhillashavadhanula/Library/Caches/pip/wheels/6a/f5/9c/f8331a854f7a8739cf0e74c13854e4dd7b1af1b04fe1dde13
Successfully built idna-ssl
Installing collected packages: multidict, async-timeout, idna-ssl, yarl, typing-extensions, aiohttp, coronavirus
Successfully installed aiohttp-3.6.2 async-timeout-3.0.1 coronavirus-1.1.0 idna-ssl-1.1.0 multidict-4.7.5 typing-extensions-3.7.4.1 yarl-1.4.2
Note: you may need to restart the kernel to use updated packages.
```

```
In [4]: coronavirus

-----
NameError                                Traceback (most recent call last)
<ipython-input-4-8c81458c1f8b> in <module>
----> 1 coronavirus

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

```
In [5]: pip install pytrends

Collecting pytrends
  Downloading pytrends-4.7.2.tar.gz (17 kB)
Requirement already satisfied: requests in ./Downloads/anaconda3/lib/python3.6/site-packages (from pytrends) (2.22.0)
Requirement already satisfied: pandas in ./Downloads/anaconda3/lib/python3.6/site-packages (from pytrends) (1.0.1)
Requirement already satisfied: lxml in ./Downloads/anaconda3/lib/python3.6/site-packages (from pandas) (4.5.0)
Requirement already satisfied: urllib3!=1.25.0,!=1.25.1,<1.26,>=1.21.1 in ./Downloads/anaconda3/lib/python3.6/site-packages (from pandas->pytrends) (1.25.8)
Requirement already satisfied: multidict<5.0,>=4.5 in ./Downloads/anaconda3/lib/python3.6/site-packages (from aiohttp>=3.5.2->pytrends) (3.0.4)
Requirement already satisfied: certifi>=2017.4.17 in ./Downloads/anaconda3/lib/python3.6/site-packages (from requests->pytrends) (2019.11.28)
Requirement already satisfied: idna<2.9,>=2.5 in ./Downloads/anaconda3/lib/python3.6/site-packages (from requests->pytrends) (2.8)
Requirement already satisfied: numpy>=1.13.3 in ./Downloads/anaconda3/lib/python3.6/site-packages (from pandas->pytrends) (1.18.1)
Requirement already satisfied: python-dateutil>=2.6.1 in ./Downloads/anaconda3/lib/python3.6/site-packages (from pandas->pytrends) (2.8.1)
Requirement already satisfied: pytz>=2017.2 in ./Downloads/anaconda3/lib/python3.6/site-packages (from pandas->pytrends) (2019.3)
Requirement already satisfied: six>=1.5 in ./Downloads/anaconda3/lib/python3.6/site-packages (from python-dateutil>=2.6.1->pandas->pytrends) (1.14.0)
Building wheels for collected packages: pytrends
  Building wheel for pytrends (setup.py) ... done
  Created wheel for pytrends: filename=pytrends-4.7.2-py3-none-any.whl size=14261 sha256=ac1d4c0b560ab1513e3f593c1b0c760197e48a41b2ce39250146c0e41f256c4c
    Stored in directory: /Users/abhillashavadhanula/Library/Caches/pip/wheels/ba/e9/63/a7be983fd9d25e31e75dd4389b6f5ea8b5191c20396a6dc52
Successfully built pytrends
Installing collected packages: pytrends
Successfully installed pytrends-4.7.2
Note: you may need to restart the kernel to use updated packages.
```

```
In [6]: from pytrends.request import TrendReq
```

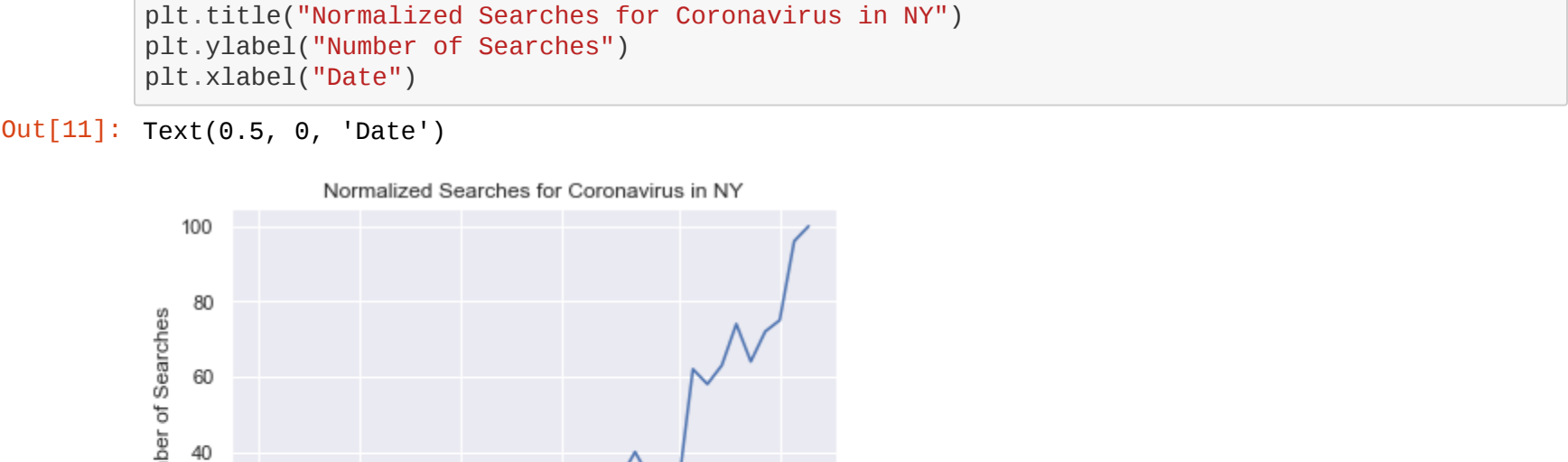
```
In [9]: pytrends = TrendReq(hl='en-IND', tz=360)
pytrends.build_payload(['Coronavirus'], cat=0, timeframe='2020-02-01 2020-03-10', gprop='', geo='US-NY')
```

```
In [10]: df = pytrends.interest_over_time()
print(df.head())
```

```
Coronavirus  isPartial
date
2020-02-01      17      False
2020-02-02      18      False
2020-02-03      17      False
2020-02-04      15      False
2020-02-05      11      False
```

```
In [11]: import matplotlib.pyplot as plt
import seaborn as sns
import pandas as pd
sns.set()
df['timestamp'] = pd.to_datetime(df.index)
sns.lineplot(df['timestamp'], df['Coronavirus'])
plt.title("Normalized Searches For Coronavirus in NY")
plt.ylabel("Number of Searches")
plt.xlabel("Date")
```

```
Out[11]: Text(0.5, 0, 'Date')
```



```
In [12]: pip install slackclient

Collecting slackclient
  Downloading slackclient-2.5.0-py2.py3-none-any.whl (54 kB)
    | 54 kB 1.2 MB/s eta 0:00:01
Requirement already satisfied: aiohttp>=3.5.2 in ./Downloads/anaconda3/lib/python3.6/site-packages (from slackclient) (3.6.2)
Requirement already satisfied: attrs>=17.3.0 in ./Downloads/anaconda3/lib/python3.6/site-packages (from aiohttp>=3.5.2->slackclient) (19.3.0)
Requirement already satisfied: multidict<5.0,>=4.5 in ./Downloads/anaconda3/lib/python3.6/site-packages (from aiohttp>=3.5.2->slackclient) (3.0.4)
Requirement already satisfied: typing-extensions>=3.6.5; python_version < "3.7" in ./Downloads/anaconda3/lib/python3.6/site-packages (from aiohttp>=3.5.2->slackclient) (3.7.4.1)
Requirement already satisfied: chardet<4.0,>=2.0 in ./Downloads/anaconda3/lib/python3.6/site-packages (from aiohttp>=3.5.2->slackclient) (3.0.4)
Requirement already satisfied: idna-ssl>=1.0; python_version < "3.7" in ./Downloads/anaconda3/lib/python3.6/site-packages (from aiohttp>=3.5.2->slackclient) (1.1.0)
Requirement already satisfied: yarl<2.0,>=1.0 in ./Downloads/anaconda3/lib/python3.6/site-packages (from aiohttp>=3.5.2->slackclient) (1.4.2)
Requirement already satisfied: async-timeout<4.0,>=3.0 in ./Downloads/anaconda3/lib/python3.6/site-packages (from aiohttp>=3.5.2->slackclient) (3.0.1)
Requirement already satisfied: idna>=2.0 in ./Downloads/anaconda3/lib/python3.6/site-packages (from idna-ssl>=1.0; python_version < "3.7"->aiohttp>=3.5.2->slackclient) (2.8)
Installing collected packages: slackclient
Successfully installed slackclient-2.5.0
```