In [13]:
```
#1
import pandas as pd
names = ['santy','pournami','athulya']
x = pd.Series(names)
print(names)
print(x)
```

```
['santy', 'pournami', 'athulya']
0       santy
1    pournami
2     athulya
dtype: object
```

In [15]:
```
#2
import pandas as np
sr = pd.date_range('2021-05-01','2021-05-12',freq = 'D')
x=pd.Series(sr)
#print(x)
print(x.to_string(index=False))
```

```
2021-05-01
2021-05-02
2021-05-03
2021-05-04
2021-05-05
2021-05-06
2021-05-07
2021-05-08
2021-05-09
2021-05-10
2021-05-11
2021-05-12
```

In [19]:
```
#3
import pandas as pd

d = {
    'Name' : ['santy','pournami','athulya'],
    'Age' : [23,24,22],
    'Course':['MCA','MCA','MCA'],
}
df = pd.DataFrame(d)
print(df.to_string(index=False))
```

```
    Name  Age Course
   santy   23    MCA
pournami   24    MCA
 athulya   22    MCA
```

In [25]:
```
#4

import pandas as pd
a=[[11,12],[14,15]]
b=pd.DataFrame(a)
print(b)
```

```
    0   1
0  11  12
1  14  15
```

In [1]:
```
#5

import pandas as pd
```

```
df = pd.read_csv('5.csv')

print(df.to_string())
```

```
       name  mark
0     santy    40
1  pournami    44
2   athulya    46
```

In [32]:
```
#6

import pandas as pd

df = pd.DataFrame({'Name': ['santy','pournami','athulya','aish','rahul','ann
                   'Age': [23,24,22,22,21,13],
                   'Rank': [0,1,2,3,4,5]})

print(df.to_string())
print('SORTED DATAFRAME BY NAME ')
df = df.sort_values(by=['Name'], ascending=[True])
print(df.to_string())

print('SORTED DATAFRAME BY AGE ')
df = df.sort_values(by=['Age'], ascending=[True])
print(df.to_string())
```

```
       Name  Age  Rank
0     santy   23     0
1  pournami   24     1
2   athulya   22     2
3      aish   22     3
4     rahul   21     4
5       ann   13     5
SORTED DATAFRAME BY NAME
       Name  Age  Rank
3      aish   22     3
5       ann   13     5
2   athulya   22     2
1  pournami   24     1
4     rahul   21     4
0     santy   23     0
SORTED DATAFRAME BY AGE
       Name  Age  Rank
5       ann   13     5
4     rahul   21     4
3      aish   22     3
2   athulya   22     2
0     santy   23     0
1  pournami   24     1
```

In [36]:
```
#7

import pandas as pd

data = {'Name': ['santy','pournami','athulya','aish','rahul','ann'],
                   'Age': [23,24,22,22,21,13],
                   'Rank': [0,1,2,3,4,5],}

index = ['a1', 'b1', 'c1', 'd1', 'e1','f1']

df = pd.DataFrame(data,index)
print(df.to_string())
df.reset_index(inplace = True, drop = True)
print(df.to_string())
```

```
        Name  Age  Rank
a1     santy   23     0
b1  pournami   24     1
c1   athulya   22     2
d1      aish   22     3
e1     rahul   21     4
f1       ann   13     5
       Name  Age  Rank
0     santy   23     0
1  pournami   24     1
2   athulya   22     2
3      aish   22     3
4     rahul   21     4
5       ann   13     5
```

In [42]:
```
#8

import pandas as pd
df = pd.DataFrame({'Name': ['santy','pournami','athulya','aish','rahul','ann
                   'Age': [23,24,22,22,21,13],
                   'Rank': [0,1,2,3,4,5]})
print(df[:2])
```

```
       Name  Age  Rank
0     santy   23     0
1  pournami   24     1
```

In [47]:
```
#9

import pandas as pd
df = pd.DataFrame({'Name': ['santy','pournami','athulya','aish','rahul','ann
                   'Occupation': ['teacher','doctor','engineer','teacher','d
                   'Salary': [12000,35000,50000,14000,40000,30000]})

df = pd.DataFrame(df)
print(df)
avg = df.groupby('Occupation')['Salary'].mean()
print("  Average salary per occupation : ")
print(avg)
```

```
       Name Occupation  Salary
0     santy    teacher   12000
1  pournami     doctor   35000
2   athulya   engineer   50000
3      aish    teacher   14000
4     rahul     doctor   40000
5       ann       vect   30000
  Average salary per occupation :
Occupation
doctor      37500.0
engineer    50000.0
teacher     13000.0
vect        30000.0
Name: Salary, dtype: float64
```

In [53]:
```
#10
import pandas as pd
import numpy as np

nums = {'Set_of_Numbers': [2, 3, np.nan, 7, 11, 13,np.nan, 19, 23, np.nan]}
df = pd.DataFrame(nums)
df = df.fillna(0)
print(df)
```

```
   Set_of_Numbers
0             2.0
1             3.0
2             0.0
3             7.0
4            11.0
5            13.0
6             0.0
7            19.0
8            23.0
9             0.0
```

In [54]:
```
#11
import pandas as pd

details = {
    'cname' : ['deloitte','IBM','UST','Accenture'],
    'profit' : [24,25,0,-27],
}

df = pd.DataFrame(details)

df.loc[df.profit <= 0,'profit'] = False
df.loc[df.profit > 0,'profit'] = True
print(df)
```

```
       cname profit
0   deloitte   True
1        IBM   True
2        UST  False
3  Accenture  False
```

In [56]:
```
#12
import pandas as pd

details_1 = {
    'eid' : [1,2,3,4],
    'ename' : ['ann','pournami','santy','athulya'],
    'stipend':[123,131,23,434],
}

details_2 = {
    'eid' : [1,2,3,4],
    'designation' : ['manager','analyst','tester','CEO'],
}

df_1 = pd.DataFrame(details_1)
df_2 = pd.DataFrame(details_2)

dataframe = pd.merge(df_1, df_2, how = 'inner', on = 'eid')
print(dataframe)
```

```
   eid     ename  stipend designation
0    1       ann      123     manager
1    2  pournami      131     analyst
2    3     santy       23      tester
3    4   athulya      434         CEO
```

In [ ]:

In [ ]: