NAME: NERELLA VENKATA RADHAKRISHNA

ID: 190031187

SKILL-1

In [1]:
```
import pandas as pd
import numpy as np
```

In [2]:
```
#1. Use series method to convert the following list [‘a’,’b’,’c’,’d’]

list=['a','b','c','d']
series=pd.Series(list)
print(series)
```

```
0    a
1    b
2    c
3    d
dtype: object
```

In [3]:
```
d=['radha','krishna','kowshik','sudheer','chandu','ashok']
m=[[67,89,68,95], [87,94,97,76], [77,85,99,74], [90,89,92,78], [83,97,80,98],[90,90,80,87]]
s=['DS','AI','MPII','CNS']
```

In [14]:
```
#2. Create data frames which club them all using pandas
df=pd.DataFrame(data=m,index=d,columns=s)
df
```

Out[14]:

	DS	AI	MPII	CNS
radha	67	89	68	95
krishna	87	94	97	76
kowshik	77	85	99	74
sudheer	90	89	92	78
chandu	83	97	80	98
ashok	90	90	80	87

In [15]:
```
#3. Add the TS , total columns to the data frame from which TS is the sum of  DS,AI,MPII and t
df['TS']=df['DS']+df['AI']+df['MPII']
df['TOTAL']=df['DS']+df['AI']+df['MPII']+df['CNS']+df['TS']
df
```

Out[15]:

	DS	AI	MPII	CNS	TS	TOTAL
radha	67	89	68	95	224	543
krishna	87	94	97	76	278	632
kowshik	77	85	99	74	261	596
sudheer	90	89	92	78	271	620
chandu	83	97	80	98	260	618
ashok	90	90	80	87	260	607

In [8]:
```
#4. Display only the marks scored by Name 2 and Name3
df.loc[['krishna','kowshik']]
```

Out[8]:

	DS	AI	MPII	CNS	TS	TOTAL
krishna	87	94	97	76	278	632
kowshik	77	85	99	74	261	596

In [9]:
```
#5. Display all the students marks who scored 90 + marks in DS
df[df['DS']>90]
```

Out[9]:

	DS	AI	MPII	CNS	TS	TOTAL

In [10]:
```
#6. DS teacher wants to know the total marks achieved by students in DS , Help her by using th
sum(df['DS'])
```

Out[10]: 494

In [16]:
```
#B) Include .csv file in python
dataset=pd.read_csv('MOTORS.csv')
dataset
```

Out[16]:

	flow rate(lit/min;/ /	speed	capacity	voltage	current	temprature	capacity in watt	performance
0	40	1400	0.5	120	3.104167	10	372.5	0
1	80	2800	1.0	240	3.104167	20	745.0	0
2	40	1400	0.5	120	3.104167	10	372.5	0
3	160	5600	2.0	480	3.104167	40	1490.0	1
4	40	1400	0.5	120	3.104167	10	372.5	0
...	...	...	...	...	...	...	...	...
194	80	2800	1.0	240	3.104167	20	745.0	0
195	40	1400	0.5	120	3.104167	10	372.5	0
196	80	2800	1.0	240	3.104167	20	745.0	0
197	160	5600	2.0	480	3.104167	40	1490.0	1
198	80	2800	1.0	240	3.104167	20	745.0	0

199 rows × 8 columns