In [2]:

```
import pandas as pd
import numpy as np
```

In [4]:

```
data=pd.DataFrame(np.arange(0,16).reshape(4,4),index=["a","b","c","d"],columns=["x","y","z"
data
```

Out[4]:

	x	y	z	p
a	0	1	2	3
b	4	5	6	7
c	8	9	10	11
d	12	13	14	15

In [5]:

```
data.drop(["d"])
```

Out[5]:

	x	y	z	p
a	0	1	2	3
b	4	5	6	7
c	8	9	10	11

In [6]:

```
stu=pd.DataFrame({"names":["aanya","aaryan","neha"],"rollno":[544,545,546],"sections":["B",
stu
```

Out[6]:

	names	rollno	sections
0	aanya	544	B
1	aaryan	545	C
2	neha	546	A

In [8]:

```
clg=pd.DataFrame({"branchess":["cse","ece","eee"],"sections":["A","B","C"],"clgname":["VEC"
clg
```

Out[8]:

	branchess	sections	clgname
0	cse	A	VEC
1	ece	B	VCE
2	eee	C	MLR

In [9]:

```
pd.concat([stu,clg],axis=1)
```

Out[9]:

	names	rollno	sections	branchess	sections	clgname
0	aanya	544	B	cse	A	VEC
1	aaryan	545	C	ece	B	VCE
2	neha	546	A	eee	C	MLR

In [10]:

```
p=pd.merge(stu,clg,on="sections")
p
```

Out[10]:

	names	rollno	sections	branchess	clgname
0	aanya	544	B	ece	VCE
1	aaryan	545	C	eee	MLR
2	neha	546	A	cse	VEC

In [11]:

```
stu
```

Out[11]:

	names	rollno	sections
0	aanya	544	B
1	aaryan	545	C
2	neha	546	A

In [12]:

```
clg.head(2)
```

Out[12]:

	branchess	sections	clgname
0	cse	A	VEC
1	ece	B	VCE

In [13]:

```
clg.tail(1)
```

Out[13]:

	branchess	sections	clgname
2	eee	C	MLR

In [14]:

```
clg.describe()
```

Out[14]:

	branchess	sections	clgname
count	3	3	3
unique	3	3	3
top	ece	A	VCE
freq	1	1	1

In [15]:

```
pd.unique(stu.names)
```

Out[15]:

```
array(['aanya', 'aaryan', 'neha'], dtype=object)
```

In [16]:

```
pd.isna(stu)
```

Out[16]:

	names	rollno	sections
0	False	False	False
1	False	False	False
2	False	False	False

In [17]:

```
stu=pd.DataFrame({"names":["aanya","aaryan",np.NaN,],"rollno":[544,np.NaN,546],"sections":[
stu
```

Out[17]:

	names	rollno	sections
0	aanya	544.0	B
1	aaryan	NaN	C
2	NaN	546.0	A

In [18]:

```
pd.isna(stu)
```

Out[18]:

	names	rollno	sections
0	False	False	False
1	False	True	False
2	True	False	False

In [19]:

```
df={"sname":["aanya","aaryan","neha","vaibhav"],"age":[3,10,12,15],"id":[7,3,6,5]}
p=pd.DataFrame(df)
p
```

Out[19]:

	sname	age	id
0	aanya	3	7
1	aaryan	10	3
2	neha	12	6
3	vaibhav	15	5

In [20]:

```
bins=[0,5,10,15]
```

In [22]:

```
class_names=["playschool","preprimary","primary"]
```

In [23]:

```
p["age_group"]=pd.cut(p.age,bins,labels=class_names)
p
```

Out[23]:

	sname	age	id	age_group
0	aanya	3	7	playschool
1	aaryan	10	3	preprimary
2	neha	12	6	primary
3	vaibhav	15	5	primary

In [ ]:

```

```