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

india_weather = pd.DataFrame ({
    "city":["mumbai","delhi","banglore"],
    "temporature":[32,45,30],
    "humidity": [80,60,78]
})
india_weather
```

Out[3]:

	city	temporature	humidity
0	mumbai	32	80
1	delhi	45	60
2	banglore	30	78

In [7]:
```
us_weather = pd.DataFrame ({
    "city":["new york","chicago","orlando"],
    "temporature":[21,14,35],
    "humidity": [68,65,75]
})
us_weather
```

Out[7]:

	city	temporature	humidity
0	new york	21	68
1	chicago	14	65
2	orlando	35	75

In [8]:
```
df=pd.concat([india_weather,us_weather])
df
```

Out[8]:

	city	temporature	humidity
0	mumbai	32	80
1	delhi	45	60
2	banglore	30	78
0	new york	21	68
1	chicago	14	65
2	orlando	35	75

In [9]:
```
df=pd.concat([india_weather,us_weather], ignore_index=True)
df
```

Out[9]:

	city	temporature	humidity
0	mumbai	32	80
1	delhi	45	60
2	banglore	30	78
3	new york	21	68
4	chicago	14	65
5	orlando	35	75

In [13]:
```
df=pd.concat([india_weather,us_weather], keys= ["india","us"])
df
```

Out[13]:

		city	temporature	humidity
india	**0**	mumbai	32	80
	1	delhi	45	60
	2	banglore	30	78
us	**0**	new york	21	68

	city	temporature	humidity
1	chicago	14	65
2	orlando	35	75

In [14]:
```
df.loc["india"] #["us"]
```

Out[14]:

	city	temporature	humidity
0	mumbai	32	80
1	delhi	45	60
2	banglore	30	78

In [ ]:
```
#Useful when you need to get data from bigdata
```

In [29]:
```
temperature_df = pd.DataFrame ({
     "city":["mumbai","delhi","banglore"],
    "temporature":[32,45,30]
})
temperature_df
```

Out[29]:

	city	temporature
0	mumbai	32
1	delhi	45
2	banglore	30

In [30]:
```
windspeed_df = pd.DataFrame ({
    "city":["mumbai","delhi","banglore"],
    "windspeed":[7,14,9]
})
windspeed_df
```

Out[30]:

	city	windspeed
0	mumbai	7
1	delhi	14
2	banglore	9

In [32]:
```
df = pd.concat([temperature_df , windspeed_df])
df
```

Out[32]:

	city	temporature	windspeed
0	mumbai	32.0	NaN
1	delhi	45.0	NaN
2	banglore	30.0	NaN
0	mumbai	NaN	7.0
1	delhi	NaN	14.0
2	banglore	NaN	9.0

In [34]:
```
df = pd.concat([temperature_df , windspeed_df], axis=1)
df
```

Out[34]:

	city	temporature	city	windspeed
0	mumbai	32	mumbai	7
1	delhi	45	delhi	14
2	banglore	30	banglore	9

In [38]:
```
windspeed_df = pd.DataFrame({
    "city": ["delhi","mumbai"],
    "windspeed":[7,12]
}, index=[1,0]) #Index is the way to align data frame
windspeed_df
```

Out[38]:

	city	windspeed
1	delhi	7
0	mumbai	12

In [39]:
```
df = pd.concat([temperature_df , windspeed_df], axis=1) #dosen't look c
orrect
df
```

Out[39]:

	city	temporature	city	windspeed
0	mumbai	32	mumbai	12.0
1	delhi	45	delhi	7.0
2	banglore	30	NaN	NaN

In [40]:
```
temperature_df
```

Out[40]:

	city	temporature
0	mumbai	32
1	delhi	45
2	banglore	30

In [41]:
```
s = pd.Series(["Humid","Dry","Rain"], name="event")
s
```

Out[41]:
```
0    Humid
1      Dry
2     Rain
Name: event, dtype: object
```

In [44]:
```
df = pd.concat([temperature_df, s], axis=1)
df
```

Out[44]:

	city	temporature	event
0	mumbai	32	Humid
1	delhi	45	Dry
2	banglore	30	Rain