In [1]: # reading the csv file

 ${\color{red}\textbf{import}} \ \, \text{pandas} \ \, {\color{red}\textbf{as}} \ \, \text{pd}$

import numpy as np

import matplotlib.pyplot as plt

import seaborn as sns

In [4]: path=r"C:\Users\rakes\naresh it data science (adi)\Data files\bank - bank.csv
pd.read_csv(path)

Out[4]:

	age	job	marital	education	default	balance	housing	loan	contact	day	mor
0	30	unemployed	married	primary	no	1787	no	no	cellular	19	(
1	33	services	married	secondary	no	4789	yes	yes	cellular	11	m
2	35	management	single	tertiary	no	1350	yes	no	cellular	16	8
3	30	management	married	tertiary	no	1476	yes	yes	unknown	3	j
4	59	blue-collar	married	secondary	no	0	yes	no	unknown	5	m
4516	33	services	married	secondary	no	-333	yes	no	cellular	30	
4517	57	self- employed	married	tertiary	yes	-3313	yes	yes	unknown	9	m
4518	57	technician	married	secondary	no	295	no	no	cellular	19	а
4519	28	blue-collar	married	secondary	no	1137	no	no	cellu l ar	6	f
4520	44	entrepreneur	single	tertiary	no	1136	yes	yes	cellular	3	٤

4521 rows × 17 columns

```
pd.read_csv(path,sep=";")
In [5]:
Out[5]:
                 age,job,marital,education,default,balance,housing,loan,contact,day,month,duration,campaign,pda
              0
                                                                                     30,unemployed,married,p
              1
                                                                                      33, services, married, sec
              2
                                                                                      35, management, single,
              3
                                                                                     30, management, married
              4
                                                                                       59,blue-collar,married,
                                                                                       33, services, married, sec
           4516
           4517
                                                                                        57,self-employed,mar
           4518
                                                                                      57,technician,married,s
           4519
                                                                                       28,blue-collar,married,s
           4520
                                                                                        44, entrepreneur, singl
          4521 rows × 1 columns
          # create dataframes using list
In [6]:
          name=['ramesh','suresh','satish']
          age=[30,35,40]
          name, age
Out[6]: (['ramesh', 'suresh', 'satish'], [30, 35, 40])
In [7]:
          pd.DataFrame(zip(name,age))
Out[7]:
                    0
                       1
                      30
              ramesh
                      35
           1
               suresh
           2
                satish 40
```

```
In [19]: # provide coloumns
    data=zip(name,age)
    cols=['name','age']
    d1=pd.DataFrame(data,columns=cols)
    d1
```

Out[19]:

	Hame	aye
0	ramesh	30
1	suresh	35
2	satish	40

```
In [27]: name=['ramesh','suresh','satish']
    age=[30,35,40]
    data=zip(name,age)
    cols=['Name','Age']
    index=['A','B','C']
    df=pd.DataFrame(data,columns=cols,index=ind)
    df
```

Out[27]:

	Haine	Age
а	ramesh	30
b	suresh	35
С	satish	40

Name Age

```
In [28]: #add new column
    city_names=["hyd","blr",'chennai']
    df["city"]=city_names
    df
```

Out[28]:

city	Age	Name	
hyd	30	ramesh	а
blr	35	suresh	b
chennai	40	satish	С

```
In [29]: # update the existing column
df['Name']=['swamy','asif','sathwik']
df
```

Out[29]:

city	Age	Name	
hyd	30	swamy	а
blr	35	asif	b
chennai	40	sathwik	С

```
In [30]: # DROP THE COLUMN
df.drop('city',axis=1,inplace=True)
df
```

Out[30]:

```
        Name
        Age

        a
        swamy
        30

        b
        asif
        35

        c
        sathwik
        40
```

```
In [31]: # drop rows
df.drop('c',axis=0,inplace=True)
df
```

Out[31]:

```
        Name
        Age

        a
        swamy
        30

        b
        asif
        35
```

```
In [32]: #save the data frame
df.to_csv('output1.csv')
```

```
In [33]: pd.read_csv('output1.csv')
```

Out[33]:

	Unnamed: 0	Name	Age	
0	а	swamy	30	
1	b	asif	35	

```
In [36]: # remove the index
# TO avoid problem give index=False
df.to_csv("output1.csv",index=False)
```

```
In [37]: pd.read_csv('output1.csv')
```

Out[37]:

	Ivaille	Age
0	swamy	30
1	asif	35

```
In [44]:
         # create dataframes using dicitionary
         d1={'name':['ramesh','suresh','satish'],'age':[30,35,40]}
         d2=pd.DataFrame(d1)
In [46]: | d2['name2']=['asif','adi','piyush']
```

Out[46]:

name2	city	age	name	
asif	asif	30	ramesh	0
adi	adi	35	suresh	1
piyush	piyush	40	satish	2

```
In [ ]:
```