In [1]:

```
import pandas as pd
```

In [2]:

```
df = pd.read_csv('E:\\6th Sem\DATA SCIENCE\PANDAS.csv')
```

In [3]:

```
df.head()
```

Out[3]:

	NAME	AGE	GENDER	CITY	MARKS
0	NAVEEN	20	MALE	VIRUDHUNAGAR	95
1	KARTHIK	20	MALE	VIRUDHUNAGAR	85
2	BALA	21	MALE	RAMNAD	80
3	RANJUTHAN	21	MALE	CHENNAI	75
4	KOWSANTH	20	MALE	NAGARKOVIL	79

In [4]:

```
df.head(9)
```

Out[4]:

	NAME	AGE	GENDER	CITY	MARKS
0	NAVEEN	20	MALE	VIRUDHUNAGAR	95
1	KARTHIK	20	MALE	VIRUDHUNAGAR	85
2	BALA	21	MALE	RAMNAD	80
3	RANJUTHAN	21	MALE	CHENNAI	75
4	KOWSANTH	20	MALE	NAGARKOVIL	79
5	RAJI	21	FEMALE	MADURAI	79
6	SHAMBHAVI	19	FEMALE	COIMBATORE	81
7	RAM	20	MALE	MADURAI	83
8	LAKSHMI	19	FEMALE	KARAIKUDI	75

In [5]:

```
df.tail(6)
```

Out[5]:

	NAME	AGE	GENDER	CITY	MARKS
8	LAKSHMI	19	FEMALE	KARAIKUDI	75
9	LAVANYA	19	FEMALE	VIRUDHUNAGAR	80
10	JAI	20	MALE	MADURAI	69
11	SAM	21	FEMALE	MADURAI	90
12	SRITHAR	21	MALE	ERODE	69
13	DHINESH	20	MALE	SALEM	88

In [7]:

```
print(df['NAME'])
```

```
0        NAVEEN
1       KARTHIK
2          BALA
3     RANJUTHAN
4      KOWSANTH
5          RAJI
6     SHAMBHAVI
7           RAM
8       LAKSHMI
9       LAVANYA
10          JAI
11          SAM
12      SRITHAR
13      DHINESH
Name: NAME, dtype: object
```

In [8]:

```
df.describe()
```

Out[8]:

	AGE	MARKS
count	14.000000	14.000000
mean	20.142857	80.571429
std	0.770329	7.408044
min	19.000000	69.000000
25%	20.000000	76.000000
50%	20.000000	80.000000
75%	21.000000	84.500000
max	21.000000	95.000000

In [11]:

```
df.sort_values('CITY')
```

Out[11]:

	NAME	AGE	GENDER	CITY	MARKS
3	RANJUTHAN	21	MALE	CHENNAI	75
6	SHAMBHAVI	19	FEMALE	COIMBATORE	81
12	SRITHAR	21	MALE	ERODE	69
8	LAKSHMI	19	FEMALE	KARAIKUDI	75
5	RAJI	21	FEMALE	MADURAI	79
7	RAM	20	MALE	MADURAI	83
10	JAI	20	MALE	MADURAI	69
11	SAM	21	FEMALE	MADURAI	90
4	KOWSANTH	20	MALE	NAGARKOVIL	79
2	BALA	21	MALE	RAMNAD	80
13	DHINESH	20	MALE	SALEM	88
0	NAVEEN	20	MALE	VIRUDHUNAGAR	95
1	KARTHIK	20	MALE	VIRUDHUNAGAR	85
9	LAVANYA	19	FEMALE	VIRUDHUNAGAR	80

In [12]:

```
df = df.drop(columns=['GENDER'])
```

In [13]:

```
df.head()
```

Out[13]:

	NAME	AGE	CITY	MARKS
0	NAVEEN	20	VIRUDHUNAGAR	95
1	KARTHIK	20	VIRUDHUNAGAR	85
2	BALA	21	RAMNAD	80
3	RANJUTHAN	21	CHENNAI	75
4	KOWSANTH	20	NAGARKOVIL	79

In [14]:

```
df.count()
```

Out[14]:

```
NAME      14
AGE       14
CITY      14
MARKS     14
dtype: int64
```

In [15]:

```
df.shape
```

Out[15]:

```
(14, 4)
```

In [16]:

```
df.index
```

Out[16]:

```
RangeIndex(start=0, stop=14, step=1)
```

In [17]:

```
df[0:6]
```

Out[17]:

	NAME	AGE	CITY	MARKS
0	NAVEEN	20	VIRUDHUNAGAR	95
1	KARTHIK	20	VIRUDHUNAGAR	85
2	BALA	21	RAMNAD	80
3	RANJUTHAN	21	CHENNAI	75
4	KOWSANTH	20	NAGARKOVIL	79
5	RAJI	21	MADURAI	79

In [20]:

```
df.iloc[1]
```

Out[20]:

```
NAME           KARTHIK
AGE                 20
CITY     VIRUDHUNAGAR
MARKS               85
Name: 1, dtype: object
```

In [21]:

```
df.mean()
```

```
C:\Users\91948\AppData\Local\Temp/ipykernel_17620/3698961737.py:1: FutureWar
ning: Dropping of nuisance columns in DataFrame reductions (with 'numeric_on
ly=None') is deprecated; in a future version this will raise TypeError.  Sel
ect only valid columns before calling the reduction.
  df.mean()
```

Out[21]:

```
AGE      20.142857
MARKS    80.571429
dtype: float64
```

In [23]:

```
df.min()
```

Out[23]:

```
NAME        BALA
AGE           19
CITY     CHENNAI
MARKS         69
dtype: object
```

In [24]:

```
df.max()
```

Out[24]:

```
NAME          SRITHAR
AGE                21
CITY     VIRUDHUNAGAR
MARKS              95
dtype: object
```

In [25]:

```
df.mean()
```

```
C:\Users\91948\AppData\Local\Temp/ipykernel_17620/3698961737.py:1: FutureWar
ning: Dropping of nuisance columns in DataFrame reductions (with 'numeric_on
ly=None') is deprecated; in a future version this will raise TypeError.  Sel
ect only valid columns before calling the reduction.
  df.mean()
```

Out[25]:

```
AGE      20.142857
MARKS    80.571429
dtype: float64
```

In [26]:

```
df.median()
```

```
C:\Users\91948\AppData\Local\Temp/ipykernel_17620/530051474.py:1: FutureWarn
ing: Dropping of nuisance columns in DataFrame reductions (with 'numeric_onl
y=None') is deprecated; in a future version this will raise TypeError.  Sele
ct only valid columns before calling the reduction.
  df.median()
```

Out[26]:

```
AGE      20.0
MARKS    80.0
dtype: float64
```

In [28]:

```
df.loc[:,['NAME','MARKS']]
```

Out[28]:

	NAME	MARKS
0	NAVEEN	95
1	KARTHIK	85
2	BALA	80
3	RANJUTHAN	75
4	KOWSANTH	79
5	RAJI	79
6	SHAMBHAVI	81
7	RAM	83
8	LAKSHMI	75
9	LAVANYA	80
10	JAI	69
11	SAM	90
12	SRITHAR	69
13	DHINESH	88

In [29]:

```
df.dtypes
```

Out[29]:

```
NAME      object
AGE        int64
CITY      object
MARKS      int64
dtype: object
```

In [ ]:

```

```