In [1]:

```python
import pandas as pd
```

In [6]:

```python
df=pd.read_csv("//home//ubuntu//Downloads//archive (9)//Mall_Customers.csv")
df
```

Out[6]:

	CustomerID	Genre	Age	Annual Income (k$)	Spending Score (1-100)
0	1	Male	19	15	39
1	2	Male	21	15	81
2	3	Female	20	16	6
3	4	Female	23	16	77
4	5	Female	31	17	40
...	...	...	...	...	...
195	196	Female	35	120	79
196	197	Female	45	126	28
197	198	Male	32	126	74
198	199	Male	32	137	18
199	200	Male	30	137	83

200 rows × 5 columns

In [7]:

```python
df.mean()
```

```
/tmp/ipykernel_3588/3698961737.py:1: FutureWarning: Dropping of nuisan
ce columns in DataFrame reductions (with 'numeric_only=None') is depre
cated; in a future version this will raise TypeError.  Select only val
id columns before calling the reduction.
  df.mean()
```

Out[7]:

```
CustomerID              100.50
Age                      38.85
Annual Income (k$)       60.56
Spending Score (1-100)   50.20
dtype: float64
```

In [8]:

```python
df.Age.mean()
```

Out[8]:

```
38.85
```

In [9]:

```python
df.loc[:,'Age'].mean()
```

Out[9]:

38.85

In [10]:

```python
df.mean(axis=1)[0:4]
```

/tmp/ipykernel_3588/1148177455.py:1: FutureWarning: Dropping of nuisan
ce columns in DataFrame reductions (with 'numeric_only=None') is depre
cated; in a future version this will raise TypeError. Select only val
id columns before calling the reduction.
  df.mean(axis=1)[0:4]

Out[10]:

```
0    18.50
1    29.75
2    11.25
3    30.00
dtype: float64
```

In [11]:

```python
df.Age.median()
```

Out[11]:

36.0

In [12]:

```python
df.loc[:,'Age'].median()
```

Out[12]:

36.0

In [13]:

```python
df.median(axis=1)[0:4]
```

/tmp/ipykernel_3588/381455229.py:1: FutureWarning: Dropping of nuisanc
e columns in DataFrame reductions (with 'numeric_only=None') is deprec
ated; in a future version this will raise TypeError. Select only vali
d columns before calling the reduction.
  df.median(axis=1)[0:4]

Out[13]:

```
0    17.0
1    18.0
2    11.0
3    19.5
dtype: float64
```

In [14]:

```python
df.Age.std()
```

Out[14]:

13.96900733155888

In [15]:

```python
df.loc[:,'Age'].std()
```

Out[15]:

13.96900733155888

In [16]:

```python
df.std(axis=1)[0:4]
```

```
/tmp/ipykernel_3588/3966588610.py:1: FutureWarning: Dropping of nuisan
ce columns in DataFrame reductions (with 'numeric_only=None') is depre
cated; in a future version this will raise TypeError.  Select only val
id columns before calling the reduction.
  df.std(axis=1)[0:4]
```

Out[16]:

```
0    15.695010
1    35.074920
2     8.057088
3    32.300671
dtype: float64
```

In [17]:

```python
df.min()
```

Out[17]:

```
CustomerID                     1
Genre                     Female
Age                           18
Annual Income (k$)            15
Spending Score (1-100)         1
dtype: object
```

In [18]:

```python
df.loc[:,'Age'].min(skipna=False)
```

Out[18]:

18

In [19]:

```
df.max()
```

Out[19]:

```
CustomerID                200
Genre                    Male
Age                        70
Annual Income (k$)        137
Spending Score (1-100)     99
dtype: object
```

In [20]:

```
df.groupby(['Genre'])['Age'].mean()
```

Out[20]:

```
Genre
Female    38.098214
Male      39.806818
Name: Age, dtype: float64
```

In [21]:

```
df=pd.read_csv("//home//ubuntu//Downloads//archive (9)//Mall_Customers.csv")
df
```

Out[21]:

	CustomerID	Genre	Age	Annual Income (k$)	Spending Score (1-100)
0	1	Male	19	15	39
1	2	Male	21	15	81
2	3	Female	20	16	6
3	4	Female	23	16	77
4	5	Female	31	17	40
...	...	...	...	...	...
195	196	Female	35	120	79
196	197	Female	45	126	28
197	198	Male	32	126	74
198	199	Male	32	137	18
199	200	Male	30	137	83

200 rows × 5 columns

In [22]:

```python
df.groupby(['Genre'])['Annual Income (k$)'].mean()
```

Out[22]:

```
Genre
Female    59.250000
Male      62.227273
Name: Annual Income (k$), dtype: float64
```

In [ ]: