Out[2]:

```
col10 41 8
```

2 15

3 16

4 23

In [6]:

Que 2-Create a variable of list type containing 10 elements in it, and apply pandas. Series function on the variable print it.""

```
d=[1,2,3,4,5,6,7,8,9,10]
df1=pd.Series(data=d)
print(df1.head())
print(type(df1))
```

```
0    1
1    2
2    3
3    4
4    5
dtype: int64
<class 'pandas.core.series.Series'>
```

```
In [9]:
        Que 3-
        Q3. Create a Pandas DataFrame that contains the following data:
        Then, print the DataFrame.
        Name
                 Age
                        Gender
        Alice
                  25
                          Female
        Bob
                  30
                          Male
        Claire
                          Female
                  27
        d={'Name':['Alice','Bob','Claire'],'Age':[25,30,27], 'Gender':['Female','Male'
        df3=pd.DataFrame(data=d)
        df3.head()
```

Out[9]:

	Name	Age	Gender
0	Alice	25	Female
1	Bob	30	Male
2	Claire	27	Female

In []:

Que 4-What is 'DataFrame' in pandas and how is it different from pandas.series Explain with an example.

Ans 4-

A DataFrame is a data structure that organizes data into a 2-dimensional table of rows and columns, much like a spreadsheet

Series elements must be of the same data type. Heterogenous - DataFrame elements can have different data types

```
In [10]:
         Que 5-What are some common functions you can use to manipulate data in a Panda
         DataFrame? Can you give an example of when you might use one of these function
         Ans 5 some common function in the python
         1) describe()
         2) isnull()
         3) dtype()
         4) .head() or tail()
         Que 6-Which of the following is mutable in nature Series, DataFrame, Panel?
         Ans 6- Series are notmutable
                DataFrame are mutable
                Panel are mutable
         Que-7. Create a DataFrame using multiple Series. Explain with an example.
         Ans 7-
         import pandas as pd
         d=['ashish','Rakesh','vaibhav']
         df5=pd.DataFrame(data=d)
         df5.head(5)
```

Out[10]:

0

- 0 ashish
- 1 Rakesh
- 2 vaibhav

In []: