

In [ ]:

```
# Pandas  
# instal => pip install pandas
```

In [ ]:

```
# Series  
# 1 D Labeled Hetro or Homo Array(Series)
```

In [ ]:

```
# pandas vs Numpy => Numpy array is used for the implementation of Pandas data objects
```

In [1]:

```
import pandas as pd
```

In [2]:

```
pd.__version__
```

Out[2]:

```
'0.24.2'
```

In [3]:

```
# convert list into series  
  
data1 = [1,2,3.45,70,'micky']  
data1
```

Out[3]:

```
[1, 2, 3.45, 70, 'micky']
```

In [4]:

```
type(data1)
```

Out[4]:

```
list
```

In [6]:

```
# convert into series
series1 = pd.Series(data1)
series1
```

Out[6]:

```
0      1
1      2
2    3.45
3     70
4    micky
dtype: object
```

In [7]:

```
type(series1)
```

Out[7]:

```
pandas.core.series.Series
```

In [9]:

```
# Another way of creating Series

series2 = pd.Series([10,20,30,40,50])
series2
```

Out[9]:

```
0    10
1    20
2    30
3    40
4    50
dtype: int64
```

In [10]:

```
# create empty series
series3 = pd.Series([])
series3
```

Out[10]:

```
Series([], dtype: float64)
```

In [11]:

```
# creating own index value
```

```
series4 = pd.Series([10,20,30,40,50,60],index=['a','b','c','d','e','f'])  
series4
```

Out[11]:

```
a    10  
b    20  
c    30  
d    40  
e    50  
f    60  
dtype: int64
```

In [12]:

```
# default index start from 0 ----
```

```
series5 = pd.Series([10,20,30,40,50,60])  
series5
```

Out[12]:

```
0    10  
1    20  
2    30  
3    40  
4    50  
5    60  
dtype: int64
```

In [13]:

```
# change data type
```

```
series6 = pd.Series([10,20,30,40,50,60],index=['Harish','Suresh','Shoeb','Venkat','Wahed','Yogesh'])  
series6
```

Out[13]:

```
Harish    10  
Suresh    20  
Shoeb     30  
Venkat    40  
Wahed     50  
Yogesh    60  
dtype: int64
```

In [14]:

```
# change data type
```

```
series7 = pd.Series([10,20,30,40,50,60],index=['Harish','Suresh','Shoeb','Venkat','Wahed','Yogesh'],  
series7
```

Out[14]:

```
Harish    10.0  
Suresh    20.0  
Shoeb     30.0  
Venkat    40.0  
Wahed     50.0  
Yogesh    60.0  
dtype: float64
```