

* Series :-

A series is a data structure of python pandas which is

- > a one-dimensional (1-D) array
- > It stores homogenous data (either int or float or string).
- > size immutable data structure.
- > data mutable data structure.

• Creating Series in different ways :->

(i) From Numpy Arrays :->

```
import pandas as pd
import numpy as np
```

} → importing required libraries

```
arr = np.array(['A', 'B', 'C', 'D'])
ser = pd.Series(arr)
```

} → statements to create series

```
print(ser)
```

} → printing the series.

(ii) From Lists :->

```
import pandas as pd
```

```
se = pd.Series(['Amit', 'Raman', 'Ram', 'Raj'])
```

```
print(se)
```


(iii) From Dictionary :-

```
import pandas as pd
```

```
dict = { 'Jan': 'Aman', 'Feb': 'Reena', 'March': 'Sumit',  
        'April': 'Karpil' }
```

```
se = pd.Series(dict)
```

```
print(se)
```

while creating series
from dictionary,

Keys → index
value → value/date

(iv) From Scalar value :-

```
import pandas as pd
```

```
se = pd.Series('Hello Guys', range(0, 10))
```

```
print(se)
```

It will create series of 10 values with similar data i.e. "Hello Wo Guys".

The data / numeric data count associated with every row / value in a series is called as its index. By default, it starts from zero(0) but it can be manipulated / changed.