

```
In [11]: import pandas as pd
import random
import numpy as np
```

```
In [3]: #Q1
arr = [2,6,5,9]
df = pd.DataFrame(arr)
df
```

```
Out[3]:  0
         2
         6
         5
         9
```

```
In [8]: #Q2
rand = [random.randint(1,20) for x in range(5)]
rand_series = pd.Series(rand)
print(rand_series)
print(type(rand_series))

rand_list = list(rand_series)
print(rand_list)
print(type(rand_list))
```

```
0    5
1    5
2    8
3    1
4    6
dtype: int64
<class 'pandas.core.series.Series'>
[5, 5, 8, 1, 6]
<class 'list'>
```

```
In [13]: #Q3
arr1 = [5,8,9,10]
s1 = pd.Series(arr)
s2 = pd.Series(arr1)

print(s1+s1)
print(s1-s1)
print(s1*s1)
```

```
0    4
1   12
2   10
3   18
dtype: int64
0    0
1    0
```

```

2    0
3    0
dtype: int64
0    4
1    36
2    25
3    81
dtype: int64

```

In [14]:

```

#Q4
d = {
    1: 'a',
    2: 'b',
    3: 'c'
}
dict_series = pd.Series(d)
print(d)

```

```
{1: 'a', 2: 'b', 3: 'c'}
```

In [21]:

```

#Q5
np_arr = np.arange(6)
s = pd.Series(np_arr)
print(s)

```

```

0    0
1    1
2    2
3    3
4    4
5    5
dtype: int32

```

In [24]:

```

#Q6
df = pd.DataFrame([[1,2,5],[4,5,6],[2,0,9]], columns = {'c1','c2','c3'})
print(df)
COL1 = df['c1']
series_col = pd.Series(COL1)
series_col

```

```

   c1  c2  c3
0    1   2   5
1    4   5   6
2    2   0   9

```

Out[24]:

```

0    1
1    4
2    2
Name: c1, dtype: int64

```

In []: