Experiment 12

```
import pandas
data = [1,2,3,4]
series1=pandas.Series(data)
print(series1)
print(series1[0:2])
```

```
0    1
1    2
2    3
3    4
dtype: int64
0    1
1    2
dtype: int64
```

```
data = [1,2,3,4,5]
series1=pandas.Series(data,index = ['a','b','c','d','e'])
print(series1)
print(series1['a':'b'])
```

```
a    1
b    2
c    3
d    4
e    5
dtype: int64
a    1
b    2
dtype: int64
```

```
data = [[1,2,3,4,5],[6,7]]
df=pandas.DataFrame(data)
print(df)
```

```
   0  1    2    3    4
0  1  2  3.0  4.0  5.0
1  6  7  NaN  NaN  NaN
```

```
data={'a':[1,2,3,4],
      'b':[5,6,7,8]}
df=pandas.DataFrame(data)
print(df)
```

```
   a  b
0  1  5
1  2  6
2  3  7
3  4  8
```

```
data={'fruits':['grapes','apple','mango','banana'],
      'count':[5,6,7,8]}
df=pandas.DataFrame(data)
print(df)
```

```
   fruits  count
0  grapes      5
1   apple      6
2   mango      7
3  banana      8
```

```
# Concantenate Two Data Frames
data={'a':[1,2,3,4],
      'b':[5,6,7,8]}
df1=pandas.DataFrame(data)

data={'fruits':['grapes','apple','mango','banana'],
      'count':[5,6,7,8]}
df2=pandas.DataFrame(data)

df3=pandas.concat([df1, df2])
print(df3)

df4=pandas.concat([df1, df2], axis=1, join='inner')
print(df4)
```

```
     a    b  fruits  count
0  1.0  5.0     NaN    NaN
```

```
1  2.0  6.0     NaN    NaN
2  3.0  7.0     NaN    NaN
3  4.0  8.0     NaN    NaN
0  NaN  NaN  grapes    5.0
1  NaN  NaN   apple    6.0
2  NaN  NaN   mango    7.0
3  NaN  NaN  banana    8.0
   a  b  fruits  count
0  1  5  grapes      5
1  2  6   apple      6
2  3  7   mango      7
3  4  8  banana      8
```

```
# Merge
data={'a':[1,2,3,4],
      'b':[5,6,7,8]}
df1=pandas.DataFrame(data)

data={'fruits':['grapes','apple','mango','banana'],
      'b':[5,6,7,8]}
df2=pandas.DataFrame(data)
df3=pandas.merge(df1, df2, how='inner')
print(df3)
```

```
   a  b  fruits
0  1  5  grapes
1  2  6   apple
2  3  7   mango
3  4  8  banana
```