Convention for importing Pandas

```
import pandas as pd
import numpy as np

days = pd.Series(['Monday', 'Tuesday', 'Wednesday'])
print(days)
```

```
0       Monday
1      Tuesday
2    Wednesday
dtype: object
```

```
#creating series with a numpy array
days_list = np.array(['Monday', 'Tuesday', 'Wednesday'])
numpy_days = pd.Series(days_list)
print(numpy_days)
```

```
0       Monday
1      Tuesday
2    Wednesday
dtype: object
```

```
# Using strings as index
days = pd.Series(['Monday', 'Tuesday', 'Wednesday'],
                 index = ['a', 'b', 'c']
                 )
#create series from a dictionary
days1 = pd.Series({'a':'Monday', 'b': 'Tuesday', 'c': 'Wednesday'})
print(days)
print(days1)
```

```
a       Monday
b      Tuesday
c    Wednesday
dtype: object
a       Monday
b      Tuesday
c    Wednesday
dtype: object
```

```
#Accessing Series
days[0]
```

```
'Monday'
```

```
days[1:]
```

```
b      Tuesday
c    Wednesday
dtype: object
```

```
days['c']
```

```
'Wednesday'
```

```
print(pd.DataFrame())
```

```
Empty DataFrame
Columns: []
Index: []
```

```
#create a dataframe from a dictionary
df_dict = {'Country':['Ghana', 'Kenya','Nigeria','Togo'],
          'Capital': ['Accra', 'Nairobi', 'Abuja', 'Lome'],
           'Population': [10000, 8500, 35000, 12000 ],
           'Age': [60, 70, 80, 75]

}

df = pd.DataFrame(df_dict, index = [2, 4, 6, 8])
df_list = [
           ['Ghana', 'Accra', 10000, 60],
            ['Kenya', 'Nairobi', 8500, 70],
            ['Nigeria', 'Abuja', 35000, 80],
            ['Togo' , 'Lome', 12000, 75]
]
df1 = pd.DataFrame(df_list, columns = ['Country', 'Capital', 'Population', 'Age'],
                   index = [2, 4, 6, 8]
                   )
df
```

	Country	Capital	Population	Age
2	Ghana	Accra	10000	60
4	Kenya	Nairobi	8500	70
6	Nigeria	Abuja	35000	80
8	Togo	Lome	12000	75

```
df1
```

	Country	Capital	Population	Age
2	Ghana	Accra	10000	60
4	Kenya	Nairobi	8500	70

```
# Select the row in the index 3
df.iloc[3]
```

```
Country        Togo
Capital        Lome
Population    12000
Age              75
Name: 8, dtype: object
```

```
# select row with index label 6
df.loc[6]
```

```
Country       Nigeria
Capital         Abuja
Population      35000
Age                80
Name: 6, dtype: object
```

```
# select the capital column
df['Capital']
```

```
2      Accra
4    Nairobi
6      Abuja
8       Lome
Name: Capital, dtype: object
```

```
df.at[6, 'Country']
```

```
'Nigeria'
```

```
df.iat[2, 0]
```

```
'Nigeria'
```

```
df['Population'].sum()
```

```
65500
```

```
df.mean()
```

```
Population    16375.00
Age              71.25
dtype: float64
```

```
df.describe()
```

	Population	Age
count	4.000000	4.000000
mean	16375.000000	71.250000
std	12499.166639	8.539126
min	8500.000000	60.000000
25%	9625.000000	67.500000
50%	11000.000000	72.500000
75%	17750.000000	76.250000
max	35000.000000	80.000000

```
df_dict2 = {'Name': ['James', 'Yemen', 'Caro', np.nan],
            'Profession': ['Researcher', 'Artist', 'Doctor', 'Writer'],
            'Experience': [12, np.nan, 10, 8],
            'Height': [np.nan, 175, 180, 150]
            }
new_df = pd.DataFrame(df_dict2)
new_df
```

	Name	Profession	Experience	Height
0	James	Researcher	12.0	NaN
1	Yemen	Artist	NaN	175.0
2	Caro	Doctor	10.0	180.0
3	NaN	Writer	8.0	150.0

```
new_df.isnull()
```

	Name	Profession	Experience	Height
0	False	False	False	True
1	False	False	True	False
2	False	False	False	False
3	True	False	False	False

```
new_df.dropna()
```

Name	Profession	Experience	Height