```python
In [1]:   import numpy as np
          import pandas as pd
```

```python
In [4]:   data = {'apples':[3,2,0,1], 'oranges': [5,4,3,2]}
          purchase = pd.DataFrame(data)
```

```python
In [5]:   purchase
```

Out[5]:

	apples	oranges
0	3	5
1	2	4
2	0	3
3	1	2

```python
In [6]:   purchase = pd.DataFrame(data, index = ['joe', 'mike', 'jhon', 'micheal'
          ])
          purchase
```

Out[6]:

	apples	oranges
joe	3	5
mike	2	4
jhon	0	3
micheal	1	2

```python
In [10]:  purchase.loc['jhon']
```

```
Out[10]:  apples    0
          oranges   3
```

```
Name: jhon, dtype: int64
```

In [13]:
```python
df = pd.read_csv ('purchases.csv')
df
```

Out[13]:

	Unnamed: 0	apples	oranges
0	June	3	0
1	Robert	2	3
2	Lily	0	7
3	David	1	2

In [14]:
```python
df = pd.read_csv ('purchases.csv', index_col = 0)
df
```

Out[14]:

	apples	oranges
June	3	0
Robert	2	3
Lily	0	7
David	1	2

In [16]:
```python
df = pd.read_json ('purchases.json')
df
```

Out[16]:

	apples	oranges
June	3	0
Robert	2	3
Lily	0	7
David	1	2

```
In [ ]:

In [17]: movie_df = pd.read_csv ('IMDB-Movie-Data.csv')
         movie_df

Out[17]:
```

	Rank	Title	Genre	Description	Director	Actors	Ye
0	1	Guardians of the Galaxy	Action,Adventure,Sci-Fi	A group of intergalactic criminals are forced ...	James Gunn	Chris Pratt, Vin Diesel, Bradley Cooper, Zoe S...	201
1	2	Prometheus	Adventure,Mystery,Sci-Fi	Following clues to the origin of mankind, a te...	Ridley Scott	Noomi Rapace, Logan Marshall-Green, Michael Fa...	201
2	3	Split	Horror,Thriller	Three girls are kidnapped by a man with a diag...	M. Night Shyamalan	James McAvoy, Anya Taylor-Joy, Haley Lu Richar...	201
3	4	Sing	Animation,Comedy,Family	In a city of humanoid animals, a hustling thea...	Christophe Lourdelet	Matthew McConaughey,Reese Witherspoon, Seth Ma...	201
4	5	Suicide Squad	Action,Adventure,Fantasy	A secret government agency recruits some of th...	David Ayer	Will Smith, Jared Leto, Margot Robbie, Viola D...	201
...	...	...	...	...	...	...	...
995	996	Secret in Their Eyes	Crime,Drama,Mystery	A tight-knit team of rising investigators, alo...	Billy Ray	Chiwetel Ejiofor, Nicole Kidman, Julia Roberts...	201

	Rank	Title	Genre	Description	Director	Actors	Ye
996	997	Hostel: Part II	Horror	Three American college students studying abroa...	Eli Roth	Lauren German, Heather Matarazzo, Bijou Philli...	200
997	998	Step Up 2: The Streets	Drama,Music,Romance	Romantic sparks occur between two dance studen...	Jon M. Chu	Robert Hoffman, Briana Evigan, Cassie Ventura,...	200
998	999	Search Party	Adventure,Comedy	A pair of friends embark on a mission to reuni...	Scot Armstrong	Adam Pally, T.J. Miller, Thomas Middleditch,Sh...	201
999	1000	Nine Lives	Comedy,Family,Fantasy	A stuffy businessman finds himself trapped ins...	Barry Sonnenfeld	Kevin Spacey, Jennifer Garner, Robbie Amell,Ch...	201

1000 rows × 12 columns

In [4]:
```python
import numpy as np
import pandas as pd
```

In [5]:
```python
movie_df = pd.read_csv ('IMDB-Movie-Data.csv')
movie_df
```

Out[5]:

	Rank	Title	Genre	Description	Director	Actors	Ye
0	1	Guardians of the Galaxy	Action,Adventure,Sci-Fi	A group of intergalactic criminals are forced ...	James Gunn	Chris Pratt, Vin Diesel, Bradley Cooper, Zoe S...	201

	Rank	Title	Genre	Description	Director	Actors	Ye
1	2	Prometheus	Adventure,Mystery,Sci-Fi	Following clues to the origin of mankind, a te...	Ridley Scott	Noomi Rapace, Logan Marshall-Green, Michael Fa...	201
2	3	Split	Horror,Thriller	Three girls are kidnapped by a man with a diag...	M. Night Shyamalan	James McAvoy, Anya Taylor-Joy, Haley Lu Richar...	201
3	4	Sing	Animation,Comedy,Family	In a city of humanoid animals, a hustling thea...	Christophe Lourdelet	Matthew McConaughey,Reese Witherspoon, Seth Ma...	201
4	5	Suicide Squad	Action,Adventure,Fantasy	A secret government agency recruits some of th...	David Ayer	Will Smith, Jared Leto, Margot Robbie, Viola D...	201
...	...	...	...	...	...	...	
995	996	Secret in Their Eyes	Crime,Drama,Mystery	A tight-knit team of rising investigators, alo...	Billy Ray	Chiwetel Ejiofor, Nicole Kidman, Julia Roberts...	201
996	997	Hostel: Part II	Horror	Three American college students studying abroa...	Eli Roth	Lauren German, Heather Matarazzo, Bijou Philli...	200
997	998	Step Up 2: The Streets	Drama,Music,Romance	Romantic sparks occur between two dance studen...	Jon M. Chu	Robert Hoffman, Briana Evigan, Cassie Ventura,...	200

	Rank	Title	Genre	Description	Director	Actors	Ye
998	999	Search Party	Adventure,Comedy	A pair of friends embark on a mission to reuni...	Scot Armstrong	Adam Pally, T.J. Miller, Thomas Middleditch,Sh...	201
999	1000	Nine Lives	Comedy,Family,Fantasy	A stuffy businessman finds himself trapped ins...	Barry Sonnenfeld	Kevin Spacey, Jennifer Garner, Robbie Amell,Ch...	201

1000 rows × 12 columns

In [6]: `movie_df.head(5)`

Out[6]:

	Rank	Title	Genre	Description	Director	Actors	Year
0	1	Guardians of the Galaxy	Action,Adventure,Sci-Fi	A group of intergalactic criminals are forced ...	James Gunn	Chris Pratt, Vin Diesel, Bradley Cooper, Zoe S...	2014
1	2	Prometheus	Adventure,Mystery,Sci-Fi	Following clues to the origin of mankind, a te...	Ridley Scott	Noomi Rapace, Logan Marshall-Green, Michael Fa...	2012
2	3	Split	Horror,Thriller	Three girls are kidnapped by a man with a diag...	M. Night Shyamalan	James McAvoy, Anya Taylor-Joy, Haley Lu Richar...	2016

	Rank	Title	Genre	Description	Director	Actors	Year
3	4	Sing	Animation,Comedy,Family	In a city of humanoid animals, a hustling thea...	Christophe Lourdelet	Matthew McConaughey,Reese Witherspoon, Seth Ma...	2016
4	5	Suicide Squad	Action,Adventure,Fantasy	A secret government agency recruits some of th...	David Ayer	Will Smith, Jared Leto, Margot Robbie, Viola D...	2016

In [7]: `movie_df.tail(5)`

Out[7]:

	Rank	Title	Genre	Description	Director	Actors	Year	Runtime (Minutes)
995	996	Secret in Their Eyes	Crime,Drama,Mystery	A tight-knit team of rising investigators, alo...	Billy Ray	Chiwetel Ejiofor, Nicole Kidman, Julia Roberts...	2015	1
996	997	Hostel: Part II	Horror	Three American college students studying abroa...	Eli Roth	Lauren German, Heather Matarazzo, Bijou Philli...	2007	
997	998	Step Up 2: The Streets	Drama,Music,Romance	Romantic sparks occur between two dance studen...	Jon M. Chu	Robert Hoffman, Briana Evigan, Cassie Ventura,...	2008	
998	999	Search Party	Adventure,Comedy	A pair of friends embark on a mission to reuni...	Scot Armstrong	Adam Pally, T.J. Miller, Thomas Middleditch,Sh...	2014	

	Rank	Title	Genre	Description	Director	Actors	Year	Runtime (Minutes)
999	1000	Nine Lives	Comedy,Family,Fantasy	A stuffy businessman finds himself trapped ins...	Barry Sonnenfeld	Kevin Spacey, Jennifer Garner, Robbie Amell,Ch...	2016	

In [8]:
```python
movie_df.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 1000 entries, 0 to 999
Data columns (total 12 columns):
 #   Column             Non-Null Count  Dtype
---  ------             --------------  -----
 0   Rank               1000 non-null   int64
 1   Title              1000 non-null   object
 2   Genre              1000 non-null   object
 3   Description        1000 non-null   object
 4   Director           1000 non-null   object
 5   Actors             1000 non-null   object
 6   Year               1000 non-null   int64
 7   Runtime (Minutes)  1000 non-null   int64
 8   Rating             1000 non-null   float64
 9   Votes              1000 non-null   int64
 10  Revenue (Millions) 872 non-null    float64
 11  Metascore          936 non-null    float64
dtypes: float64(3), int64(4), object(5)
memory usage: 93.9+ KB
```

In [11]:
```python
movie_df.shape
```

Out[11]: (1000, 12)

In [12]:
```python
temp_df = movie_df.append(movie_df)
temp_df.shape
```

Out[12]: (2000, 12)

In [ ]:

In [ ]: