

```
In [158]: import pandas as pd

import numpy as np

import matplotlib.pyplot as plt

%matplotlib inline
```

## 1. Read the dataset using pandas.

```
In [159]: ratings =pd.read_csv(r'C:\Users\sanka\DataScience\Class6\ml-20m/ratin
gs.csv')
ratings.head(2)
```

```
Out[159]:
```

	userId	movieId	rating	timestamp
0	1	2	3.5	1112486027
1	1	29	3.5	1112484676

```
In [160]: tags =pd.read_csv(r'C:\Users\sanka\DataScience\Class6\ml-20m/tags.cs
v')
tags.head(2)
```

```
Out[160]:
```

	userId	movieId	tag	timestamp
0	18	4141	Mark Waters	1240597180
1	65	208	dark hero	1368150078

```
In [161]: movies =pd.read_csv(r'C:\Users\sanka\DataScience\Class6\ml-20m/movie
s.csv')
movies.head(2)
```

```
Out[161]:
```

	movieId	title	genres
0	1	Toy Story (1995)	Adventure Animation Children Comedy Fantasy
1	2	Jumanji (1995)	Adventure Children Fantasy

## 2. Extract the first row from tags and print its type.