```
import pandas as pd
df=pd.read_csv("/content/tmdb_5000_movies.csv")
print(df)
#name of movies
print(df['original_title'])
#name and budget of movies
print(df[['original_title','budget']])
#max budget
cost=df['budget'].max()
print("budget=",cost,"$")
#sum of salary
print("summation=",df['budget'].sum(),"$")
#average budget
print("average budget",df['budget'].sum()/len(df['budget']))
#top 10 movies
print("top 10 movies",df.head(10))
#last 10 movies
print("last 10 movies",df.tail(10))
#Even records
print("even record",df.iloc[::2])
#odd records
print("odd record",df.iloc[1::2])
#movies in overview
print(df.iloc[::2, 1::3])
#budget>25cr
print(df[df['budget']>250000000])
#print all movies from US
print(df[df['runtime']>160])
#compare
#print(df[df['budget']>250000000 & df['original_language']=='cn'])
#counting
print(df.groupby('original_language').count())
C→
```

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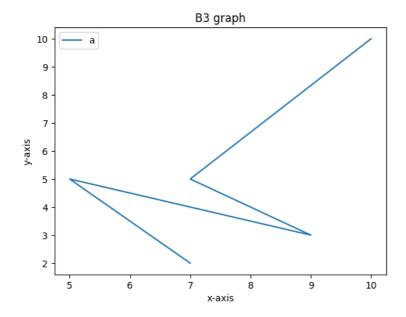
en

keywords original\_language

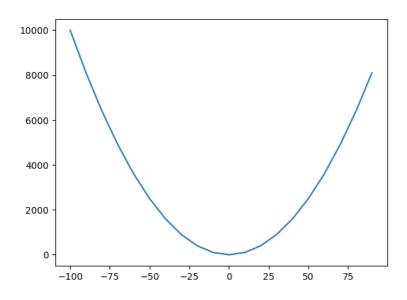
```
[{"id": 270, "name": "ocean"}, {"id": 726, "na...
         [{"id": 818,
                       "name": "based on novel"}, {"id":...
                       "name": "dual identity"}, {"id": ...
     5
         [{"id": 851,
                        "name": "hostage"}, {"id": 2343,...
     6
         [{"id": 1562.
         [{"id": 8828, "name": "marvel comic"}, {"id": ...
import pandas as pd
df=pd.read_csv("/content/grainsales.csv")
print(df)
print()
print(df.describe())
print(df.dropna(axis=1,how='all'))
print(df["State"].value_counts())
print(df.groupby("State").sum("Sales").max())
print(df.agg("min"))
print()
print(df.agg("mode"))
print()
print(df.agg("max"))
print()
print(df[["Sales"]].mean())
#print(df["Months"].count.max())
print(df[df['State']=="Panjab"])
print()
print(df['City'])
print()
print(df[['City','State','GrainName']])
print(df.loc[10:20,['State','City','Year']],"\n")
print(df.iloc[10:20])
print()
print(df.sort values(by='Sales'))
print()
print(df.sort_values(by=['City', 'Sales'], ascending=[True, False]))
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```
#assignment no 5
import matplotlib.pyplot as plt
x=[10,7,9,5,7]
y=[10,5,3,5,2]
plt.xlabel("x-axis")
plt.ylabel("y-axis")
plt.title("B3 graph")
plt.savefig("graph.png")
plt.plot(x,y)
plt.legend("aa")
plt.show()
```

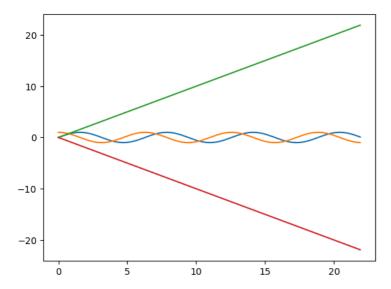


```
import matplotlib.pyplot as plt
x=range(-100,100,10)
y=[]
for i in x:
    y.append(i**2)
plt.plot(x,y)
plt.show()
```



```
from re import X
import matplotlib.pyplot as plt
import numpy as np

x=np.arange(0,7*np.pi,0.1);
y=np.sin(x)
y1=np.cos(x)
y2=np.tan(x)
plt.plot(x,y)
plt.plot(x,y1)
#plt.plot(x,y1)
#plt.plot(x,y1,y2)
y3=x
y4=-x
plt.plot(x,y3)
plt.plot(x,y4)
plt.show()
```



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