

Rohan Nyati

500075940

R177219148

Batch – 5 (Ai & MI)

Experiment – 1

The screenshot displays a Jupyter Notebook interface with the following content:

Experiment 1

```
In [11]: import pandas as pd

In [19]: data = pd.read_csv("train_triplets_sample.txt", header = None
                        , delimiter = "\s+")

# adding column headings
data.columns = ['User', 'Song', 'Play_Count']

# store dataframe into csv file
data.to_csv('train_triplets_sample_updated.csv',
            index = None)

In [20]: df = pd.read_csv("train_triplets_sample_updated.csv")

In [21]: df.head()
```

The output of the code execution is shown below:

```
Out[21]:
```

	User	Song	Play_Count
0	b80344d063b5ccb3212f76538f3d9e43d87dca9e	SOAKIMP12A8C130995	1
1	b80344d063b5ccb3212f76538f3d9e43d87dca9e	SOAPDEY12A81C210A9	1
2	b80344d063b5ccb3212f76538f3d9e43d87dca9e	SOBBMDR12A8C13253B	2
3	b80344d063b5ccb3212f76538f3d9e43d87dca9e	SOBFNSP12AF72A0E22	1
4	b80344d063b5ccb3212f76538f3d9e43d87dca9e	SOBFOVM12A58A7D494	1

```
In [30]: lst = df.values.tolist()
lst.sort()

In [31]: users = df["User"].tolist()
```

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```
In [31]: users=df["User"].tolist()

In [32]: unique_users=list(set(users))

In [33]: songs=df["Song"].tolist()
         unique_songs=list(set(songs))

In [36]: unique_users_play_count = []
         for i in unique_users:
             x=0
             count=0
             for j in lst:
                 if(j[0]==i):
                     x=1
                     count+=j[2]

                 elif(j[0]!=i and x==1):
                     break

         unique_users_play_count.append(count)
```

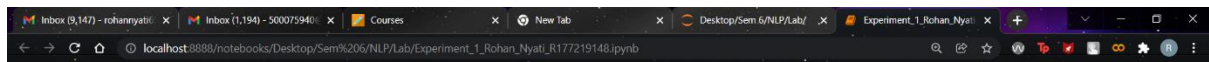
Experiment_1_Rohan_Nyati_R17721... Last Checkpoint: a minute ago (autosaved)

```
break

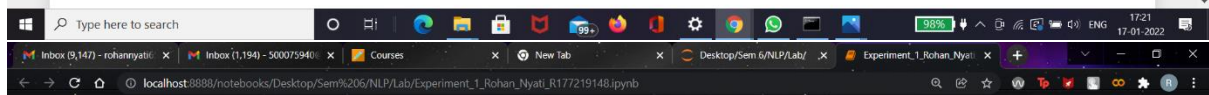
unique_users_play_count.append(count)

In [37]: unique_users_play_count

Out[37]: [80,
          228,
          125,
          58,
          34,
          78,
          606,
          24,
          164,
          73,
          16,
          95,
          18,
          70]
```



```
14,  
39,  
58,  
128,  
120]  
  
In [40]: unique_songs_play_count = []  
         for i in unique_songs:  
             x=0  
             count=0  
             for j in lst:  
                 if(j[1]==i):  
                     x=1  
                     count+=j[2]  
  
                 elif(j[1]!=i and x==1):  
                     break  
  
             unique_songs_play_count.append(count)
```



```
count+=j[2]  
  
         elif(j[1]!=i and x==1):  
             break  
  
         unique_songs_play_count.append(count)  
  
In [41]: unique_songs_play_count  
Out[41]: [1,  
          1,  
          1,  
          1,  
          8,  
          11,  
          1,  
          8,  
          1,  
          6,  
          1,  
          3,
```

Experiment_1_Rohan_Nyati... Last Checkpoint: 14 minutes ago (unsaved changes)

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```
1,
1,
1,
```

```
In [48]: play_count=df["Play_Count"].tolist()
         unique_play_count=list(set(play_count))
         x=max(unique_play_count)
         print(x)

28

In [50]: final_lst = []

         for j in lst:
             if(j[2]==x):
                 final_lst.append(j)

In [51]: final_lst
Out[51]: [['5a905f000fc1ff3df7ca807d57edb608863db05d', 'SOMVTRL12A67AE0921', 28]]
```

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```
In [52]: print(len(lst))

2000

In [53]: print(len(final_lst))

1

In [54]: # to create final List as a dataframe and save it as a different.csv file
         df_final = pd.DataFrame(final_lst, columns = ['User', 'Song', 'Max_Play_Count'])

In [55]: df_final
Out[55]:
```

	User	Song	Max_Play_Count
0	5a905f000fc1ff3df7ca807d57edb608863db05d	SOMVTRL12A67AE0921	28

```
In [56]: df_final.to_csv('Different.csv',
                        index = None)
```

