In [1]:
```
import pandas as pd
```

In [2]:
```
import numpy as np
import datetime
```

In [3]:
```
def get_data(week_nums):
    url = "http://web.mta.info/developers/data/nyct/turnstile/turnstile_{}.txt"
    dfs = []
    for week_num in week_nums:
        file_url = url.format(week_num)
        dfs.append(pd.read_csv(file_url))
    return pd.concat(dfs)

week_nums = [160903, 160910, 160917]
turnstiles_df = get_data(week_nums)
```

In [4]:
```
turnstiles_df.info()
```

```
<class 'pandas.core.frame.DataFrame'>
Int64Index: 580895 entries, 0 to 192877
Data columns (total 11 columns):
 #   Column                                                        Non-Null
Count   Dtype
---  ------                                                        ---------
-----   -----
 0   C/A                                                           580895 no
n-null  object
 1   UNIT                                                          580895 no
n-null  object
 2   SCP                                                           580895 no
n-null  object
 3   STATION                                                       580895 no
n-null  object
 4   LINENAME                                                      580895 no
n-null  object
 5   DIVISION                                                      580895 no
n-null  object
 6   DATE                                                          580895 no
n-null  object
 7   TIME                                                          580895 no
n-null  object
 8   DESC                                                          580895 no
n-null  object
 9   ENTRIES                                                       580895 no
n-null  int64
 10  EXITS                                                         580895 no
n-null  int64
dtypes: int64(2), object(9)
memory usage: 53.2+ MB
```

In [5]:
```
turnstiles_df.head()
```

Out[5]:

	C/A	UNIT	SCP	STATION	LINENAME	DIVISION	DATE	TIME	DESC	ENTRIES	
0	A002	R051	02-00-00	59 ST	NQR456	BMT	08/27/2016	00:00:00	REGULAR	5799442	19(

	C/A	UNIT	SCP	STATION	LINENAME	DIVISION	DATE	TIME	DESC	ENTRIES	
1	A002	R051	02-00-00	59 ST	NQR456	BMT	08/27/2016	04:00:00	REGULAR	5799463	19(
2	A002	R051	02-00-00	59 ST	NQR456	BMT	08/27/2016	08:00:00	REGULAR	5799492	19(
3	A002	R051	02-00-00	59 ST	NQR456	BMT	08/27/2016	12:00:00	REGULAR	5799610	19(
4	A002	R051	02-00-00	59 ST	NQR456	BMT	08/27/2016	16:00:00	REGULAR	5799833	19(

In [6]:
```
from datetime import datetime as dt
turnstiles_df["DATE_TIME"] = pd.to_datetime(turnstiles_df.DATE + " " + turnstiles_df
                                            format="%m/%d/%Y %H:%M:%S")
```

In [7]:
```
turnstiles_df['Day_Week'] = turnstiles_df["DATE_TIME"].dt.day_name()
```

In [8]:
```
turnstiles_df.head()
```

Out[8]:

	C/A	UNIT	SCP	STATION	LINENAME	DIVISION	DATE	TIME	DESC	ENTRIES	
0	A002	R051	02-00-00	59 ST	NQR456	BMT	08/27/2016	00:00:00	REGULAR	5799442	19(
1	A002	R051	02-00-00	59 ST	NQR456	BMT	08/27/2016	04:00:00	REGULAR	5799463	19(
2	A002	R051	02-00-00	59 ST	NQR456	BMT	08/27/2016	08:00:00	REGULAR	5799492	19(
3	A002	R051	02-00-00	59 ST	NQR456	BMT	08/27/2016	12:00:00	REGULAR	5799610	19(
4	A002	R051	02-00-00	59 ST	NQR456	BMT	08/27/2016	16:00:00	REGULAR	5799833	19(

In [9]:
```
turnstiles_df.sort_values(by=['STATION','UNIT','SCP','DATE','TIME'])
```

Out[9]:

	C/A	UNIT	SCP	STATION	LINENAME	DIVISION	DATE	TIME	DESC	ENTRI
29649	H007	R248	00-00-00	1 AV	L	BMT	08/27/2016	00:00:00	REGULAR	114481(

	C/A	UNIT	SCP	STATION	LINENAME	DIVISION	DATE	TIME	DESC	ENTRI
29650	H007	R248	00-00-00	1 AV	L	BMT	08/27/2016	04:00:00	REGULAR	114482
29651	H007	R248	00-00-00	1 AV	L	BMT	08/27/2016	08:00:00	REGULAR	114483
29652	H007	R248	00-00-00	1 AV	L	BMT	08/27/2016	16:00:00	REGULAR	114495
29653	H007	R248	00-00-00	1 AV	L	BMT	08/27/2016	20:00:00	REGULAR	114500
...	...	...	...	...	...	...	...	...	...	
168842	R419	R326	00-05-01	ZEREGA AV	6	IRT	09/16/2016	05:00:00	REGULAR	
168843	R419	R326	00-05-01	ZEREGA AV	6	IRT	09/16/2016	09:00:00	REGULAR	
168844	R419	R326	00-05-01	ZEREGA AV	6	IRT	09/16/2016	13:00:00	REGULAR	
168845	R419	R326	00-05-01	ZEREGA AV	6	IRT	09/16/2016	17:00:00	REGULAR	
168846	R419	R326	00-05-01	ZEREGA AV	6	IRT	09/16/2016	21:00:00	REGULAR	

580895 rows × 13 columns

In [10]:
```
turnstiles_df["entry change"]=turnstiles_df.ENTRIES.diff()
```

In [11]:
```
turnstiles_df.head()
```

Out[11]:

	C/A	UNIT	SCP	STATION	LINENAME	DIVISION	DATE	TIME	DESC	ENTRIES	
0	A002	R051	02-00-00	59 ST	NQR456	BMT	08/27/2016	00:00:00	REGULAR	5799442	19
1	A002	R051	02-00-00	59 ST	NQR456	BMT	08/27/2016	04:00:00	REGULAR	5799463	19
2	A002	R051	02-00-00	59 ST	NQR456	BMT	08/27/2016	08:00:00	REGULAR	5799492	19

	C/A	UNIT	SCP	STATION	LINENAME	DIVISION	DATE	TIME	DESC	ENTRIES	
3	A002	R051	02-00-00	59 ST	NQR456	BMT	08/27/2016	12:00:00	REGULAR	5799610	19(
4	A002	R051	02-00-00	59 ST	NQR456	BMT	08/27/2016	16:00:00	REGULAR	5799833	19(

In [12]:
```
turnstiles_df = turnstiles_df.rename(columns = {'EXITS
```

In [13]:
```
turnstiles_df["exit change"]=turnstiles_df.EXITS.diff()
```

In [14]:
```
turnstiles_df.head()
```

Out[14]:

	C/A	UNIT	SCP	STATION	LINENAME	DIVISION	DATE	TIME	DESC	ENTRIES	
0	A002	R051	02-00-00	59 ST	NQR456	BMT	08/27/2016	00:00:00	REGULAR	5799442	19(
1	A002	R051	02-00-00	59 ST	NQR456	BMT	08/27/2016	04:00:00	REGULAR	5799463	19(
2	A002	R051	02-00-00	59 ST	NQR456	BMT	08/27/2016	08:00:00	REGULAR	5799492	19(
3	A002	R051	02-00-00	59 ST	NQR456	BMT	08/27/2016	12:00:00	REGULAR	5799610	19(
4	A002	R051	02-00-00	59 ST	NQR456	BMT	08/27/2016	16:00:00	REGULAR	5799833	19(

In [15]:
```
turnstiles_df.tail()
```

Out[15]:

	C/A	UNIT	SCP	STATION	LINENAME	DIVISION	DATE	TIME	DESC	EN
192873	TRAM2	R469	00-05-01	RIT-ROOSEVELT	R	RIT	09/16/2016	05:00:00	REGULAR	
192874	TRAM2	R469	00-05-01	RIT-ROOSEVELT	R	RIT	09/16/2016	09:00:00	REGULAR	
192875	TRAM2	R469	00-05-01	RIT-ROOSEVELT	R	RIT	09/16/2016	13:00:00	REGULAR	

	C/A	UNIT	SCP	STATION	LINENAME	DIVISION	DATE	TIME	DESC	EN
192876	TRAM2	R469	00-05-01	RIT-ROOSEVELT	R	RIT	09/16/2016	17:00:00	REGULAR	
192877	TRAM2	R469	00-05-01	RIT-ROOSEVELT	R	RIT	09/16/2016	21:00:00	REGULAR	

In [16]:
```
(turnstiles_df
 .groupby(["UNIT", "SCP", "STATION", "DATE_TIME"])
 .ENTRIES.count()
 .reset_index()
 .sort_values("ENTRIES", ascending=False)).head(5)
```

Out[16]:

	UNIT	SCP	STATION	DATE_TIME	ENTRIES
406643	R276	00-00-01	VERNON-JACKSON	2016-09-16 08:00:00	2
0	R001	00-00-00	WHITEHALL S-FRY	2016-08-27 01:00:00	1
387266	R256	00-06-00	NASSAU ST	2016-09-13 12:00:00	1
387261	R256	00-06-00	NASSAU ST	2016-09-12 16:00:00	1
387262	R256	00-06-00	NASSAU ST	2016-09-12 20:00:00	1

In [17]:
```
mask = ((turnstiles_df["C/A"] == "N333A") &
(turnstiles_df["UNIT"] == "R141") &
(turnstiles_df["SCP"] == "00-00-00") &
(turnstiles_df["STATION"] == "FOREST HILLS 71") &
(turnstiles_df["DATE_TIME"].dt.date == datetime.datetime(2016, 9, 16).date()))
turnstiles_df[mask].head()
```

Out[17]:

	C/A	UNIT	SCP	STATION	LINENAME	DIVISION	DATE	TIME	DESC	ENTRIE
82989	N333A	R141	00-00-00	FOREST HILLS 71	EFMR	IND	09/16/2016	01:00:00	REGULAR	112254
82990	N333A	R141	00-00-00	FOREST HILLS 71	EFMR	IND	09/16/2016	05:00:00	REGULAR	112254
82991	N333A	R141	00-00-00	FOREST HILLS 71	EFMR	IND	09/16/2016	09:00:00	REGULAR	112261
82992	N333A	R141	00-00-00	FOREST HILLS 71	EFMR	IND	09/16/2016	13:00:00	REGULAR	112267
82993	N333A	R141	00-00-00	FOREST HILLS 71	EFMR	IND	09/16/2016	17:00:00	REGULAR	112274

In [18]:
```
turnstiles_df.DESC.value_counts()
```

Out[18]:
```
REGULAR       579109
RECOVR AUD      1786
Name: DESC, dtype: int64
```

In [19]:
```
AUDmask = ((turnstiles_df["DESC"] == "RECOVR AUD") &
           (turnstiles_df["DATE_TIME"].dt.date == datetime.datetime(2016, 9, 12).dat
turnstiles_df[AUDmask].head(5)
```

Out[19]:

	C/A	UNIT	SCP	STATION	LINENAME	DIVISION	DATE	TIME	DESC	ENTRIES
37351	J021	R434	00-00-00	VAN SICLEN AV	JZ	BMT	09/12/2016	05:00:00	RECOVR AUD	2238772
37393	J021	R434	00-00-01	VAN SICLEN AV	JZ	BMT	09/12/2016	05:00:00	RECOVR AUD	4634399
37435	J021	R434	00-00-02	VAN SICLEN AV	JZ	BMT	09/12/2016	05:00:00	RECOVR AUD	5973942
57911	N095A	R014	01-00-00	FULTON ST	2345ACJZ	IND	09/12/2016	09:27:31	RECOVR AUD	188287
57956	N095A	R014	01-00-01	FULTON ST	2345ACJZ	IND	09/12/2016	09:27:31	RECOVR AUD	2622263

In [20]:
```
turnstiles_df[AUDmask].count()
```

Out[20]:
```
C/A             31
UNIT            31
SCP             31
STATION         31
LINENAME        31
DIVISION        31
DATE            31
TIME            31
DESC            31
ENTRIES         31
EXITS           31
DATE_TIME       31
Day_Week        31
entry change    31
exit change     31
dtype: int64
```

In [21]:
```
turnstiles_df.sort_values(["UNIT", "SCP", "STATION", "DATE_TIME"],
                          inplace=True, ascending=False)
turnstiles_df.drop_duplicates(subset=["UNIT", "SCP", "STATION", "DATE_TIME"], inplac
```

In [22]:
```
(turnstiles_df
 .groupby(["UNIT", "SCP", "STATION", "DATE_TIME"])
 .ENTRIES.count()
```

```
.reset_index()
.sort_values("ENTRIES", ascending=False)).head(5)
```

Out[22]:

	UNIT	SCP	STATION	DATE_TIME	ENTRIES
0	R001	00-00-00	WHITEHALL S-FRY	2016-08-27 01:00:00	1
387266	R256	00-06-00	NASSAU ST	2016-09-13 12:00:00	1
387260	R256	00-06-00	NASSAU ST	2016-09-12 12:00:00	1
387261	R256	00-06-00	NASSAU ST	2016-09-12 16:00:00	1
387262	R256	00-06-00	NASSAU ST	2016-09-12 20:00:00	1

In [23]:
```
turnstiles_df['traffic by diff'] = turnstiles_df['entry change'] + turnstiles_df['ex
```

In [24]:
```
turnstiles_df.head()
```

Out[24]:

	C/A	UNIT	SCP	STATION	LINENAME	DIVISION	DATE	TIME	DESC	ENTR
109778	PTH03	R552	00-01-08	JOURNAL SQUARE	1	PTH	09/16/2016	19:58:21	REGULAR	206
109777	PTH03	R552	00-01-08	JOURNAL SQUARE	1	PTH	09/16/2016	15:46:21	REGULAR	206
109776	PTH03	R552	00-01-08	JOURNAL SQUARE	1	PTH	09/16/2016	11:34:21	REGULAR	205
109775	PTH03	R552	00-01-08	JOURNAL SQUARE	1	PTH	09/16/2016	07:22:21	REGULAR	205
109774	PTH03	R552	00-01-08	JOURNAL SQUARE	1	PTH	09/16/2016	03:10:21	REGULAR	205

In [25]:
```
turnstiles_df.groupby(['STATION','UNIT','SCP', 'DATE'])[['traffic by diff']].sum()
```

Out[25]:

				traffic by diff
STATION	**UNIT**	**SCP**	**DATE**	
1 AV	**R248**	**00-00-00**	**08/27/2016**	14271002.0
			08/28/2016	5644.0
			08/29/2016	7220.0
			08/30/2016	7791.0
			08/31/2016	7670.0
...	...	...	...	...

traffic by diff

STATION	UNIT	SCP	DATE	
ZEREGA AV	**R326**	**00-05-01**	**09/12/2016**	0.0
			09/13/2016	0.0
			09/14/2016	0.0
			09/15/2016	0.0
			09/16/2016	0.0

96002 rows × 1 columns

In [26]:
```
turnstiles_df.groupby(['STATION','UNIT','SCP','DATE'])['ENTRIES'].max()
```

Out[26]:
```
STATION    UNIT  SCP       DATE
1 AV       R248  00-00-00  08/27/2016    11450095
                           08/28/2016    11451910
                           08/29/2016    11455137
                           08/30/2016    11458724
                           08/31/2016    11462054
                                            ...
ZEREGA AV  R326  00-05-01  09/12/2016          39
                           09/13/2016          39
                           09/14/2016          39
                           09/15/2016          39
                           09/16/2016          39
Name: ENTRIES, Length: 96002, dtype: int64
```

In [27]:
```
DTraffic_max_min = turnstiles_df.groupby(['STATION','UNIT','SCP','DATE','Day_Week'])
```

In [28]:
```
DTraffic_df =DTraffic_max_min.reset_index()
```

In [29]:
```
DTraffic_df.columns
```

Out[29]:
```
Index(['STATION', 'UNIT', 'SCP', 'DATE', 'Day_Week', 0], dtype='object')
```

In [30]:
```
DTraffic_df = DTraffic_df.rename(columns = {0: 'Traffic'})
```

In [31]:
```
DTraffic_df.head()
```

Out[31]:

	STATION	UNIT	SCP	DATE	Day_Week	Traffic
0	1 AV	R248	00-00-00	08/27/2016	Saturday	5214
1	1 AV	R248	00-00-00	08/28/2016	Sunday	4461
2	1 AV	R248	00-00-00	08/29/2016	Monday	6319
3	1 AV	R248	00-00-00	08/30/2016	Tuesday	6898
4	1 AV	R248	00-00-00	08/31/2016	Wednesday	6699

In [32]:
```
DTraffic_df.sort_values(by = ["Traffic"], ascending=False).head(20)
```

Out[32]:

	STATION	UNIT	SCP	DATE	Day_Week	Traffic
66843	HIGH ST	R252	00-00-02	09/16/2016	Friday	3676518592
26472	57 ST-7 AV	R080	01-00-04	09/13/2016	Tuesday	3672093753
50111	CHRISTOPHER ST	R189	01-00-02	09/10/2016	Saturday	1734640927
57007	EUCLID AV	R200	00-00-02	08/28/2016	Sunday	1629936363
83397	PELHAM PKWY	R361	01-05-00	09/05/2016	Monday	117439213
2936	125 ST	R206	01-00-00	09/13/2016	Tuesday	112685711
7788	167 ST	R104	01-05-01	09/15/2016	Thursday	83885676
23280	49 ST	R081	03-06-01	09/13/2016	Tuesday	83565367
83398	PELHAM PKWY	R361	01-05-00	09/06/2016	Tuesday	33554434
57070	EUCLID AV	R200	00-00-05	08/28/2016	Sunday	26850901
1413	116 ST	R182	00-00-02	09/02/2016	Friday	18020630
56632	ELDER AV	R162	00-00-01	08/31/2016	Wednesday	16512832
83590	PENNSYLVANIA AV	R067	00-00-02	09/14/2016	Wednesday	14294796
25445	51 ST	R049	01-00-02	09/14/2016	Wednesday	10724365
42552	BERGEN ST	R129	00-00-02	09/11/2016	Sunday	4317192
56661	ELDER AV	R162	00-03-00	09/08/2016	Thursday	3613594
46643	CANAL ST	R139	00-03-01	09/07/2016	Wednesday	2983495
65723	GROVE STREET	R551	00-01-01	09/08/2016	Thursday	2147161
27902	59 ST COLUMBUS	R084	00-06-03	09/15/2016	Thursday	1786343
33789	82 ST-JACKSON H	R096	00-05-03	09/01/2016	Thursday	1585415

In [33]:
```
DTraffic_df['Traffic'].mask(DTraffic_df['Traffic'].between(10000,3676518593 ), inpla
```

In [34]:
```
DTraffic_df.sort_values(by = ["Traffic"], ascending=False).head(20)
```

Out[34]:

	STATION	UNIT	SCP	DATE	Day_Week	Traffic
67448	HOWARD BCH JFK	R535	00-00-03	09/12/2016	Monday	9895.0
34634	86 ST	R179	01-00-09	09/06/2016	Tuesday	9885.0
64459	GRD CNTRL-42 ST	R046	00-00-09	09/09/2016	Friday	9811.0
64437	GRD CNTRL-42 ST	R046	00-00-08	09/08/2016	Thursday	9798.0
92635	W 4 ST-WASH SQ	R138	01-00-00	09/09/2016	Friday	9774.0
64415	GRD CNTRL-42 ST	R046	00-00-07	09/07/2016	Wednesday	9768.0
64451	GRD CNTRL-42 ST	R046	00-00-09	09/01/2016	Thursday	9712.0
64477	GRD CNTRL-42 ST	R046	00-03-00	09/06/2016	Tuesday	9702.0
64469	GRD CNTRL-42 ST	R046	00-03-00	08/29/2016	Monday	9690.0
64457	GRD CNTRL-42 ST	R046	00-00-09	09/07/2016	Wednesday	9689.0

	STATION	UNIT	SCP	DATE	Day_Week	Traffic
64487	GRD CNTRL-42 ST	R046	00-03-00	09/16/2016	Friday	9683.0
4762	14 ST-UNION SQ	R170	01-00-00	09/13/2016	Tuesday	9676.0
34455	86 ST	R179	01-00-00	09/16/2016	Friday	9670.0
92641	W 4 ST-WASH SQ	R138	01-00-00	09/15/2016	Thursday	9670.0
64520	GRD CNTRL-42 ST	R046	00-03-02	09/07/2016	Wednesday	9663.0
64417	GRD CNTRL-42 ST	R046	00-00-07	09/09/2016	Friday	9648.0
92642	W 4 ST-WASH SQ	R138	01-00-00	09/16/2016	Friday	9639.0
4765	14 ST-UNION SQ	R170	01-00-00	09/16/2016	Friday	9620.0
64953	GRD CNTRL-42 ST	R047	00-00-01	09/15/2016	Thursday	9593.0
34628	86 ST	R179	01-00-09	08/31/2016	Wednesday	9581.0

In [35]:
```
STraffic =DTraffic_df.groupby(['Day_Week','STATION'])['Traffic'].sum()
```

In [36]:
```
STraffic_df = STraffic.reset_index()
STraffic_df.head()
```

Out[36]:

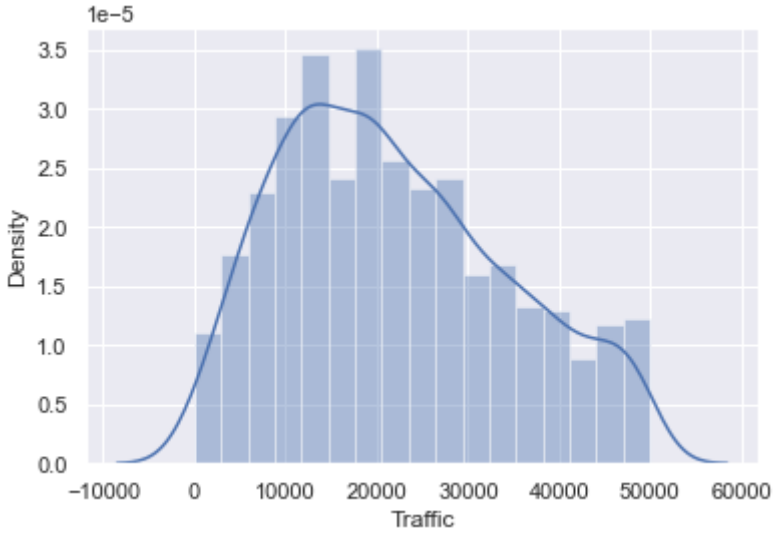
	Day_Week	STATION	Traffic
0	Friday	1 AV	117663.0
1	Friday	103 ST	150467.0
2	Friday	103 ST-CORONA	95308.0
3	Friday	104 ST	19625.0
4	Friday	110 ST	59883.0

In [37]:
```
import matplotlib.pyplot as plt
import seaborn as sns
sns.set()
```

In [40]:
```
sns.distplot(STraffic_df['Traffic']
             [STraffic_df['Traffic'] < 50000])
```

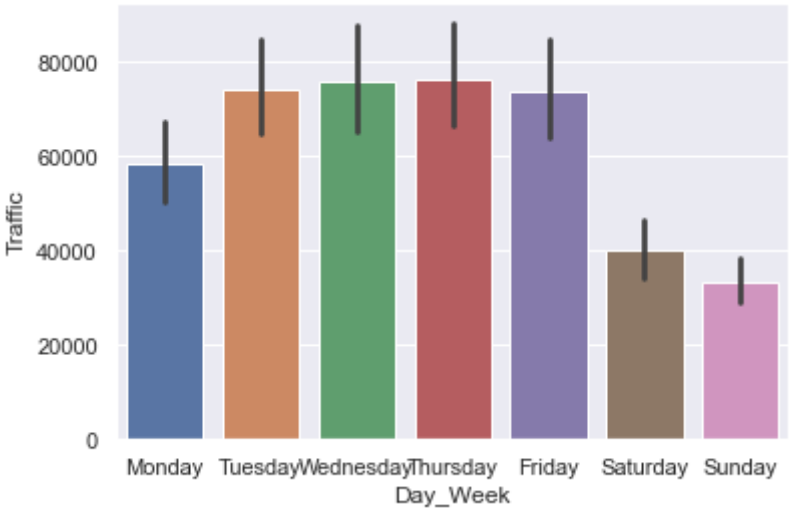
```
C:\Users\96650\anaconda3\lib\site-packages\seaborn\distributions.py:2557: FutureWarn
ing: `distplot` is a deprecated function and will be removed in a future version. Pl
ease adapt your code to use either `displot` (a figure-level function with similar f
lexibility) or `histplot` (an axes-level function for histograms).
  warnings.warn(msg, FutureWarning)
```

Out[40]: <AxesSubplot:xlabel='Traffic', ylabel='Density'>



In [44]:
```
sns.barplot(x = 'Day_Week',y='Traffic',data=STraffic_df,order=["Monday","Tuesday","W
```

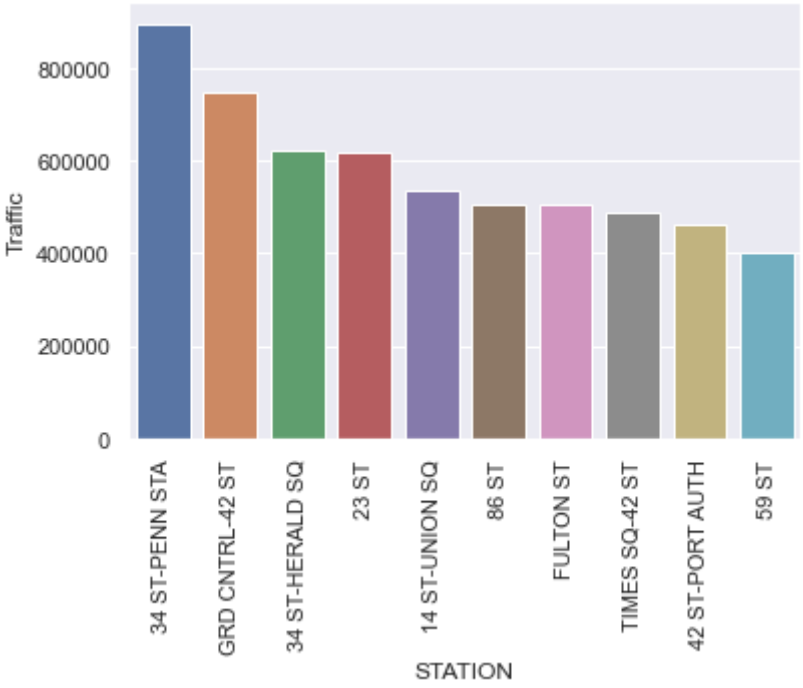
Out[44]: <AxesSubplot:xlabel='Day_Week', ylabel='Traffic'>



In [45]:
```
Wedmask = ((STraffic_df["Day_Week"] == "Wednesday") )
Wedmask.df=STraffic_df[Wedmask].sort_values(by = ["Traffic"], ascending=False).head(
```

In [46]:
```
sns.barplot(x = 'STATION',y='Traffic',data=Wedmask.df)
plt.xticks(rotation='vertical')
```

Out[46]:
```
(array([0, 1, 2, 3, 4, 5, 6, 7, 8, 9]),
 [Text(0, 0, '34 ST-PENN STA'),
  Text(1, 0, 'GRD CNTRL-42 ST'),
  Text(2, 0, '34 ST-HERALD SQ'),
  Text(3, 0, '23 ST'),
  Text(4, 0, '14 ST-UNION SQ'),
  Text(5, 0, '86 ST'),
  Text(6, 0, 'FULTON ST'),
  Text(7, 0, 'TIMES SQ-42 ST'),
  Text(8, 0, '42 ST-PORT AUTH'),
  Text(9, 0, '59 ST')])
```



In [47]:
```
Satmask = ((STraffic_df["Day_Week"] == "Saturday") )
STraffic_df[Satmask].sort_values(by = ["Traffic"], ascending=False).head(10)
```

Out[47]:

	Day_Week	STATION	Traffic
808	Saturday	34 ST-PENN STA	399038.0
761	Saturday	14 ST-UNION SQ	332317.0
806	Saturday	34 ST-HERALD SQ	318154.0
1095	Saturday	TIMES SQ-42 ST	293344.0
977	Saturday	GRD CNTRL-42 ST	292030.0
815	Saturday	42 ST-PORT AUTH	288808.0
856	Saturday	86 ST	288134.0
756	Saturday	125 ST	249314.0
793	Saturday	23 ST	238563.0
917	Saturday	CANAL ST	227500.0

In [48]:
```
totalTraffic =DTraffic_df.groupby(['STATION'])['Traffic'].sum()
TotalTraffic_df = totalTraffic.reset_index()
TotalTraffic_df.sort_values(by = ["Traffic"], ascending=False).head(10)
```

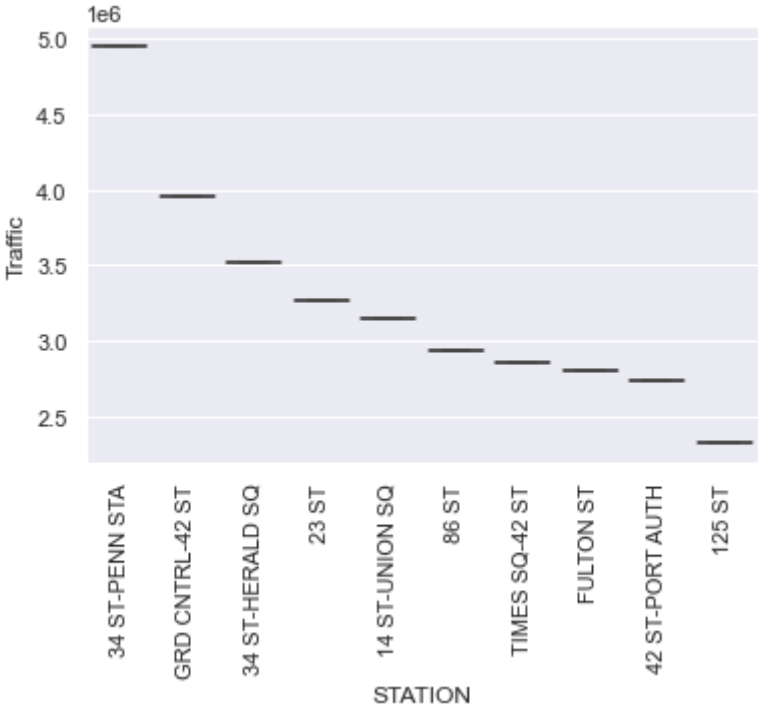
Out[48]:

	STATION	Traffic
61	34 ST-PENN STA	4947748.0
230	GRD CNTRL-42 ST	3960290.0
59	34 ST-HERALD SQ	3524088.0
46	23 ST	3260070.0
14	14 ST-UNION SQ	3144760.0
109	86 ST	2938572.0

	STATION	Traffic
349	TIMES SQ-42 ST	2848777.0
223	FULTON ST	2795361.0
68	42 ST-PORT AUTH	2734854.0
9	125 ST	2325036.0

In [49]:
```
sns.boxplot(x ="STATION", y="Traffic",data=TotalTraffic_df.sort_values(by = ["Traffi
plt.xticks(rotation='vertical')
```

Out[49]:
```
(array([0, 1, 2, 3, 4, 5, 6, 7, 8, 9]),
 [Text(0, 0, '34 ST-PENN STA'),
  Text(1, 0, 'GRD CNTRL-42 ST'),
  Text(2, 0, '34 ST-HERALD SQ'),
  Text(3, 0, '23 ST'),
  Text(4, 0, '14 ST-UNION SQ'),
  Text(5, 0, '86 ST'),
  Text(6, 0, 'TIMES SQ-42 ST'),
  Text(7, 0, 'FULTON ST'),
  Text(8, 0, '42 ST-PORT AUTH'),
  Text(9, 0, '125 ST')])
```



In [ ]: