

```
In [17]: import pandas as pd
df=pd.read_csv("Assign1_Data.csv", nrows=2000)
```

```
In [18]: df.head()
```

```
Out[18]:
```

	Crime Id	Original Crime Type Name	Report Date	Call Date	Offense Date	Call Time	Call Date Time	Dis
0	160942891	Muni Inspection	2016-04- 03T00:00:00	2016-04- 03T00:00:00	2016-04- 03T00:00:00	18:15	2016-04- 03T18:15:00	Not recd
1	160930487	913	2016-04- 02T00:00:00	2016-04- 02T00:00:00	2016-04- 02T00:00:00	03:55	2016-04- 02T03:55:00	HA
2	160941602	Passing Call	2016-04- 03T00:00:00	2016-04- 03T00:00:00	2016-04- 03T00:00:00	11:49	2016-04- 03T11:49:00	HA
3	160922392	Passing Call	2016-04- 01T00:00:00	2016-04- 01T00:00:00	2016-04- 01T00:00:00	16:09	2016-04- 01T16:09:00	Not recd
4	160923170	Threats / Harassment	2016-04- 01T00:00:00	2016-04- 01T00:00:00	2016-04- 01T00:00:00	19:11	2016-04- 01T19:11:00	NOI

```
In [19]: df2=pd.DataFrame()
```

```
In [22]: df2['Crime Type']=df["Original Crime Type Name"]
df2['Address Type']=df['Address Type']
df2.head()
```

```
Out[22]:
```

	Crime Type	Address Type
0	Muni Inspection	Common Location
1	913	Intersection
2	Passing Call	Common Location
3	Passing Call	Common Location
4	Threats / Harassment	Intersection

```
In [23]: df3=pd.crosstab(df2["Crime Type"],df2["Address Type"])  
df3
```

Out[23]:

Address Type	Common Location	Geo-Override	Intersection	Premise Address
Crime Type				
.25/500e	0	0	0	1
152 Jo	0	0	0	1
152 Poss	0	0	2	1
221	0	0	1	1
222	0	0	1	0
22500e	0	0	1	75
22500f	0	0	0	16
22500f/7.2.70	0	0	0	1
22500h	0	0	1	2
22500i	0	0	0	1
22500l	0	0	1	0
22514	0	0	1	0
245	0	0	0	1
252500e	0	0	0	1
311 X	0	0	1	0
415	0	1	4	5
417	0	0	0	1
418	0	0	2	1
470	1	0	0	2
487	0	0	0	1
488	1	0	0	2
500e	0	0	0	9
500f	0	0	0	2
500h	0	0	0	1
5150 Poss	0	0	0	1
518	0	0	8	2
518/muni	0	0	1	0
528 Poss	0	0	1	0
586	0	0	1	0
594	0	0	1	1
...

Address Type	Common Location	Geo-Override	Intersection	Premise Address
Crime Type				
Susp	0	0	2	5
Susp Info	0	0	0	1
Suspicious Person	7	2	66	64
Suspicious Vehicle	3	1	31	18
Sw	0	0	0	8
Threats / Harassment	2	0	4	9
Traf Violation Cite	0	2	2	7
Traf Violation Tow	0	0	0	8
Traffic Stop	3	5	187	20
Tratrc 7,2,25	0	0	0	1
Tratrc 7,2,41	0	0	0	1
Trc 7,2,25	0	0	0	1
Trc 7.2.46	0	0	0	2
Trespasser	3	0	0	31
Uc Hastings/405	0	0	0	1
Ug	1	0	0	1
Unoccupied	0	0	0	2
Uwg	1	0	0	0
Vandalism	1	0	9	5
Veh	0	0	1	0
Veh Accident	0	0	5	0
Vehicle Alarm	0	0	2	1
Vendors	0	0	2	0
Verbal	0	0	2	2
Wanted Vehicle / Sub	0	0	2	6
Well Being Check	3	1	17	33
Wireless-Drop	0	0	0	1
Wz	0	0	0	4
X	0	0	0	2
Yelling	0	0	0	1

247 rows × 4 columns