```
Here are top 5 crimes:
                        count
crime
BURGLARY OF VEHICLE     14437
THEFT                   14192
FAMILY DISTURBANCE       8188
CRASH/LEAVING THE SCENE  8059
CRIMINAL MISCHIEF        7390

Enter Crime: THEFT
Crime Rate Report for THEFT
Lowest between 500 and 600.
Highest between 1200 and 1300.
```
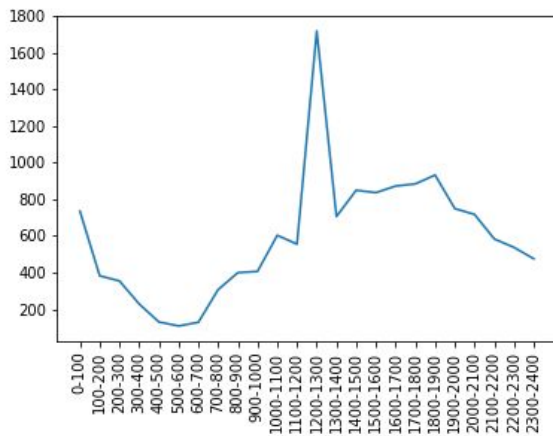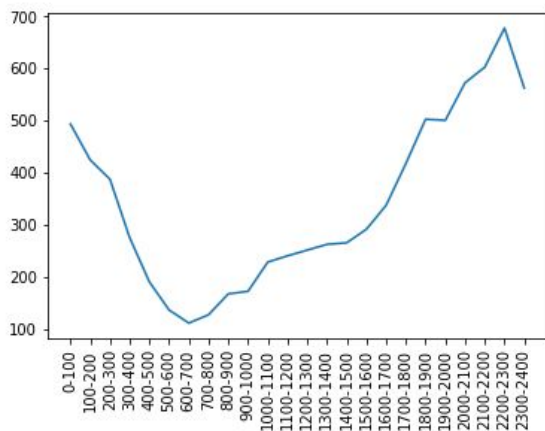


```
Enter Crime: FAMILY DISTURBANCE
Crime Rate Report for FAMILY DISTURBANCE
Lowest between 600 and 700.
Highest between 2200 and 2300.
```
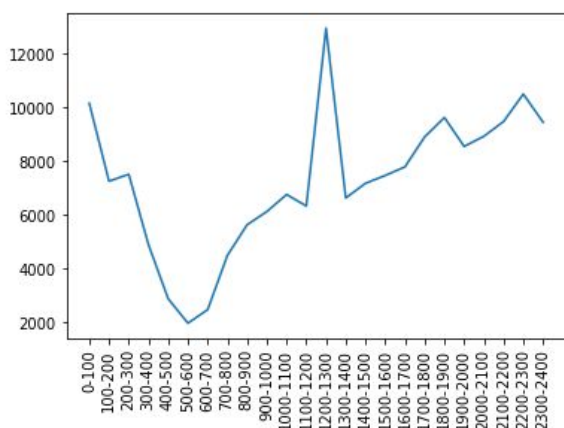


```
Enter Crime: ALL
Crime Rate Report for ALL
Lowest between 500 and 600.
Highest between 1200 and 1300.
```



```
Enter Crime: EXIT
Thank you! Bye Bye!
```

Austin TX Crime Query and Visualization

You are asked to write a simple python program what allows public to query and visualize Austin TX crime reports. You are provided with a sample report on this link:

https://data.austintexas.gov/Public-Safety/APD-Incident-Extract-2010/4c6h-tv2y

Task A:
1- you are to use pandas to read the csv data file. **[30]**
2- After reading the file, change the column names in the dataframe to: "id", "crime", "date", "time", "ltype", "address", "lng", "lat", "loc". **[20]**
3- We will only need crime, and time columns -- drop all other columns from the data frame. **[20]**

Task B:
Report the top 5 most common crime type along with the number of occurrences in the data set. **[60]**

Task C:
Repeatedly ask user for a crime type. **[20]**

Each time user enters a crime type, display the hours in which the crime has occurred lowest number of times and highest number of times during the day **[30]** along with a graph as shown on the left. **[30]**

If user enters ALL as the crime type, display the same information and graph for all data in the dataset. **[20]**

If user enters EXIT as the crime type, exit the program. **[20]**

Please double check (triple check) your submission. If you do not properly submit your exam on Blackboard, you are leaving the exam without handing in your answer sheet. Make sure that it is the right submission. If you make a mistake and submit the wrong file or submit without attaching your source code, email me your submission. You can only make one submission.

There is 10 points late penalty for every minute you are late to submit your program code. Make sure to head to Blackboard minimum 5 minutes prior to the end of the exam.

Good luck!