

Data Analytics: Data Wrangling

Exercise

Instructions:

- This screening test consist of 5 questions to be done using either R or Python(candidate to make this choice)
- Submission to be made by sharing code in .R/.py/.ipynb file format
- If shared thru interactive python, file should not contain any output
- There is no negative marking

Data:

Data for this test can be downloaded from <https://www.kaggle.com/AnalyzeBoston/crimes-in-boston>

Questionnaire

1. Write a script that shows count of Auto Theft and Towed by Phase of Day(as index) vs Month(as column).

Phase of day is defined as:

Morning	=	6 a.m to 11 a.m
Noon	=	11.01 a.m to 5 p.m
Evening	=	5.01 p.m to 8 p.m
Night	=	8.01 p.m to 5.59 a.m

Sample Output

	Jan	Feb	March.....Dec
Morning	1	2	3.....2
Noon	3	0	2.....3
Evening	1	0	0.....4
Night	0	1	1.....5

2. Write script to get offense (full offense name provided in offense_codes.csv file) per district which has maximum occurrence in respective district
3. Add a column to data set which contains date of last incidents happened in respective district
For Example: if a state has N incidents, a column should be added to dataset with (i+1)th incident having date of ith incident in that column
4. Write a script to identify street having maximum number of incidents for every district
5. Create a subset of data, with only 10 recent incidents for each Street