CS 188SL Science Gateway Seminar II
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Crime-Forecasting Assignment: Phase
I Due: March 23rd , 2017

In this Phase I Assignment, you will be analyzing crime data in the Portland, OR area. Your responsibility will be to plot known crime occurrences from a given time-period onto a 2-D matrix.

Rules

➢ Form groups of up to **3 team members.**
  o Each team will be assigned a **team number** and random **time-period** of crime data.
  o Each team must designate **one** team member to submit the final solution.
➢ You may use **Python** or **Java** to accomplish this assignment.

The Task

1. **Read** x_coordinates and y_coordinates from .csv file.
2. **Convert** x_coordinates and y_coordinates to a (i, j) coordinate pair, where:
   a. i=(TOP-int(y))/CELL_SIZE
   b. j=(int(x)-LEFT)/CELL_SIZE
   c. Constants:
      i. TOP = 733940,
      ii. LEFT = 7603950
      iii. CELL_SIZE = 250
3. **Create** a 331 X 390 2-D matrix
4. Use your (i,j) coordinate pairs to **plot** occurrences of a crime at a specific location in the 2D matrix:
   a. **0** if no crime has occurred
   b. **+1** if a crime has occurred at that cell
5. **Print** the 2-D matrix.

Submission Guidelines

Submit your [**.csv file**], [**.py** or **.java file(s)**], and a [**report.txt**] file with a summary of what you did, how you did it, <u>what each team-member's role was</u>, and <u>guidelines/commands for running your program</u>. An assigned team member will submit the final solution through BlackBoard using the team name (ex. Team 5).