Assignment #2

Part 1: Portland Crime

1. Read in the csv (**portland_crime_incident_data2017.csv**) using Pandas and return first 7 rows of the data out the DataFrame that is returned.
2. Get a count of rows within the DataFrame in order to determine if there are any null values.
3. Drop the rows which contain null values.
4. Search through the "Offense Type" column and "replace" any similar values with one consistent value.

Part 2:

1. Provide numpy code that calculates and prints each of the quantities below.
   - BA
   - AB^T
   - Ay
   - $y^T z$ (T represents transpose)
   - yz^T

   where

$$B = \begin{bmatrix} 1 & 2 & -3 \\ 3 & 4 & -1 \end{bmatrix}, \quad A = \begin{bmatrix} 2 & -5 & 1 \\ 1 & 4 & 5 \\ 2 & -1 & 6 \end{bmatrix}, \quad y = \begin{bmatrix} 2 \\ -4 \\ 1 \end{bmatrix}, \quad y = \begin{bmatrix} -15 \\ -8 \\ -22 \end{bmatrix}$$

Submission

Upload only your **.ipynb** file on course site. Please save the file using the usual file naming format.