1. create a classes and objects for the project topic that you have selected

class CrimeVisualizer:

def \_\_init\_\_(self, crime\_data):

self.data = crime\_data

def plot\_crime\_by\_group(self):

plt.figure(figsize=(10, 6))

sns.countplot(x='OFFENSE\_CODE\_GROUP', data=self.data)

plt.title('Crime by Group')

plt.xlabel('Group')

plt.ylabel('Count')

plt.show()

def plot\_crime\_by\_hour(self):

plt.figure(figsize=(10, 6))

sns.countplot(x='HOUR', data=self.data, color='blue')

plt.title('Crime by Hour')

plt.xlabel('Hour')

plt.ylabel('Count')

plt.show()

if \_\_name\_\_ == '\_\_main\_\_':

crime\_data = pd.read\_csv('crime.csv', encoding='iso-8859-1',low\_memory=False)

crime\_visualizer = CrimeVisualizer(crime\_data)

crime\_visualizer.plot\_crime\_by\_group()

crime\_visualizer.plot\_crime\_by\_hour()



