

```
import pandas as pd
import numpy as np
from matplotlib import pyplot as plt
import seaborn as sns
path="/content/drive/MyDrive/Data_sets/pbomb.csv"
!file "$path"
df = pd.read_csv(path, encoding="latin-1")
df.head()
```

/content/drive/MyDrive/Data_sets/pbomb.csv: CSV text

	S#	Date	Islamic Date	Blast Day Type	Holiday Type	Time	City	Latitude	Longitude
0	1	Sunday- November 19-1995	25 Jumaada al- THaany 1416 A.H	Holiday	Weekend	NaN	Islamabad	33.7180	73.0718
1	2	Monday- November 6-2000	10 SHa`baan 1421 A.H	Working Day	NaN	NaN	Karachi	24.9918	66.9911
2	3	Wednesday- May 8-2002	25 safar 1423 A.H	Working Day	NaN	7:45 AM	Karachi	24.9918	66.9911
3	4	Friday-June 14-2002	3 Raby` al- THaany 1423 A.H	Working Day	NaN	11:10:00 AM	Karachi	24.9918	66.9911
4	5	Friday-July 4-2003	4 Jumaada al-awal 1424 A.H	Working Day	NaN	NaN	Quetta	30.2095	67.0182

5 rows × 26 columns

```
df.shape
```

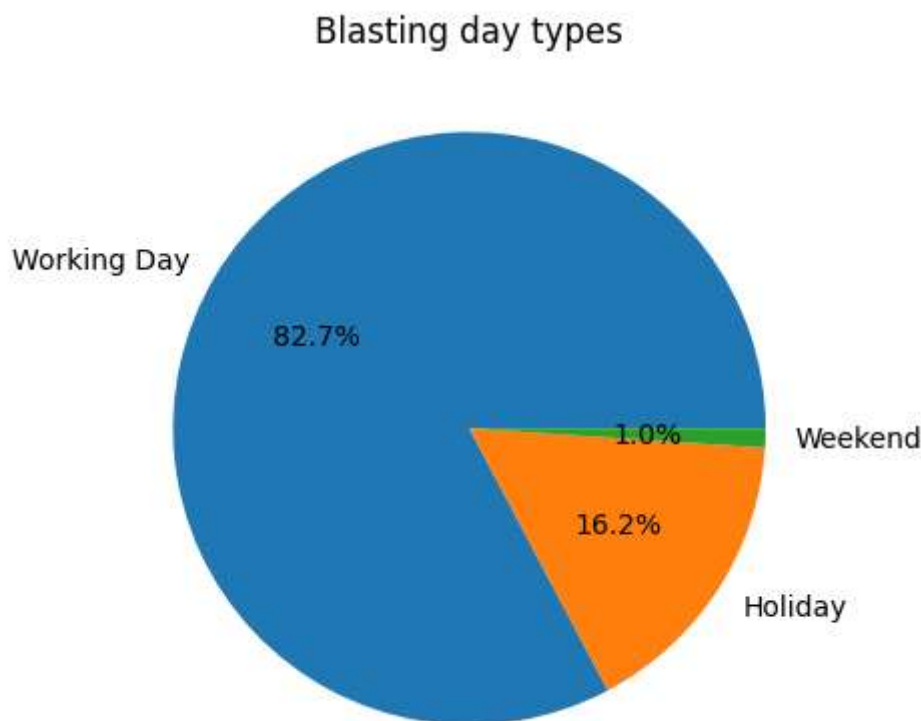
```
(492, 26)
```

```
df['Blast Day Type'].value_counts()
```

```
Working Day    398
Holiday        78
Weekend         5
Name: Blast Day Type, dtype: int64
```

```
# Create labels from the index of the value_counts() Series
labels = df['Blast Day Type'].value_counts().index.to_list()

# Plot the pie chart
plt.title('Blasting day types')
plt.pie(df['Blast Day Type'].value_counts().values, labels=labels, autopct='%1.1f%%')
plt.show()
```



Most of the bombing attacks situated in working days.

- 82.7% Working days
- 16.2% Holidays
- 1.0% Weekends

In weekends population is spreads in different areas. But working dates population is centered in small areas. So that may be affected for very low bombing attacts in weekends. Now we have to identify what about the holidays bombing attacks.

```
df['Holiday Type'].value_counts()
```

Weekend	45
Ashura	4
Eid Milad un-Nabi	3
Labour Day	3
Eid-ul-Fitar	3
Iqbal Day	2
Pakistan Day	2
Eid Holidays	2
Ashura Holiday	2
Christmas/birthday of Quaid-e-Azam	1
Eid-ul-azha	1
Defence Day	1
Christmas/ birthday of Quaid-e-Azam	1
General Elections	1
Eid ul Azha Holiday	1

Name: Holiday Type, dtype: int64

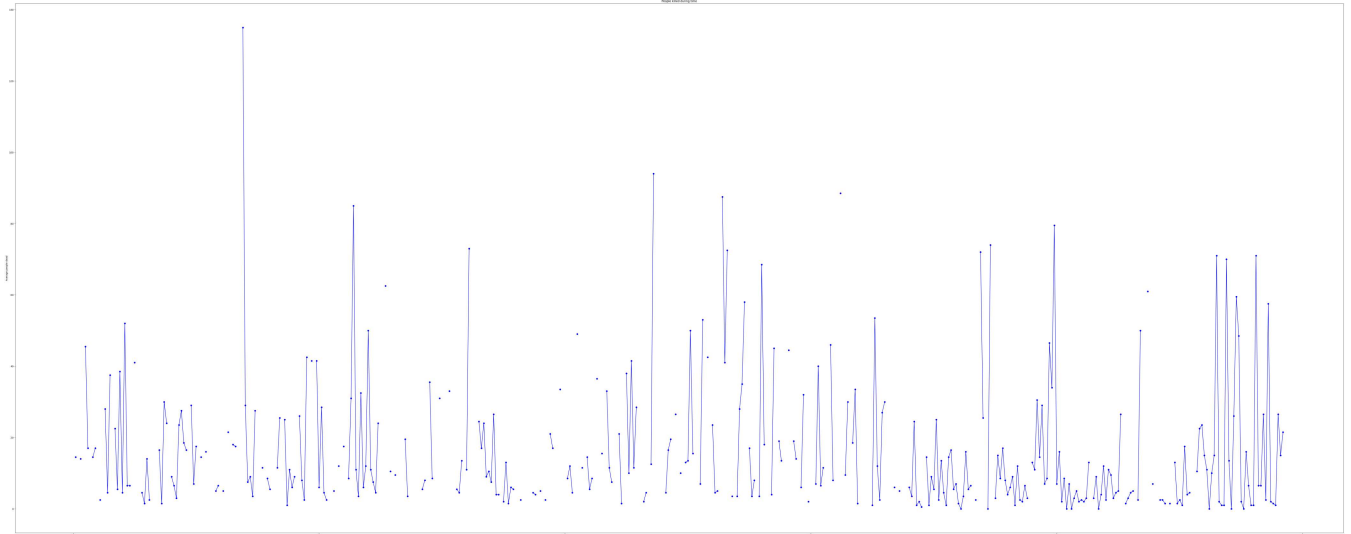
```
df["average killed"] = (df["Killed Max"] + df["Killed Min"]) / 2
df["average killed"] == (df["Killed Max"] + df["Killed Min"]) / 2
df.head()
```

	S#	Date	Islamic Date	Blast Day Type	Holiday Type	Time	City	Latitude	Longitude
0	1	Sunday- November 19-1995	25 Jumaada al- THaany 1416 A.H	Holiday	Weekend	NaN	Islamabad	33.7180	73.0718
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5 rows × 28 columns

```
plt.figure(figsize=(100,40))
plt.plot(df['S#'], df['average killed'], marker='o', linestyle='-', color='blue', label='Ma
plt.xlabel('Date bomb blasted')
plt.ylabel('Average people dead')
plt.title('People killed during time')
```

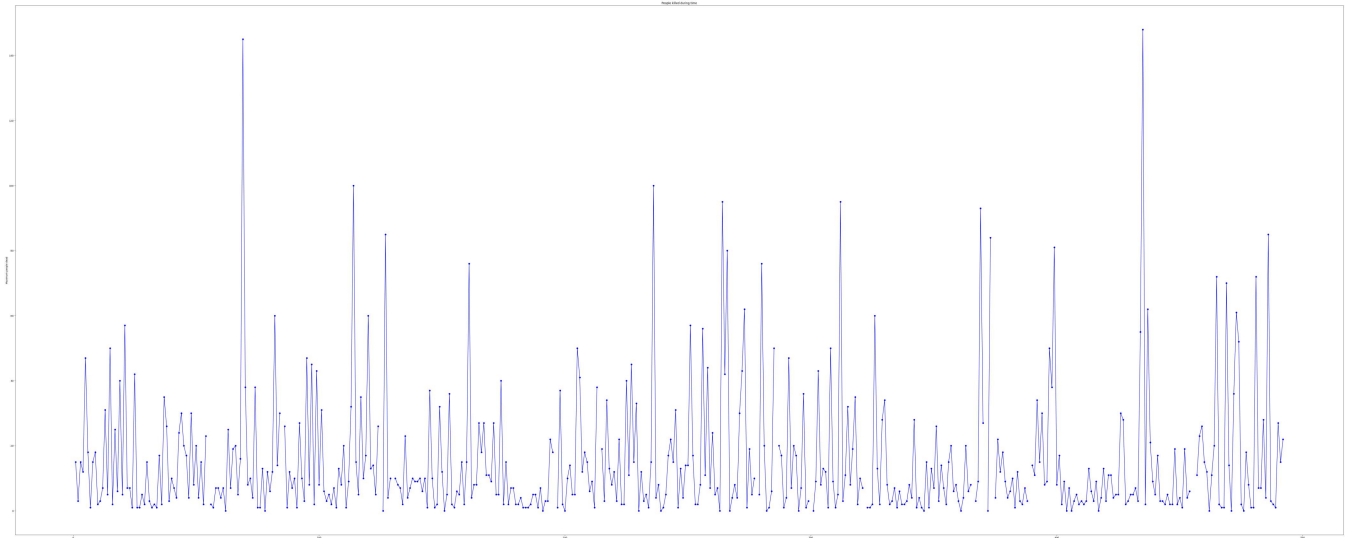
Text(0.5, 1.0, 'People killed during time')



In analyzing the data over this specific period, we observe an absence of discernible trends, presenting a seemingly random pattern. Notably, the plotted information reveals that there is neither a distinct upward nor downward trend in suicide bombing attacks. This finding adds valuable insight into the nature of such incidents during the given timeframe, emphasizing the lack of a consistent directional change in the frequency of these attacks. From here taken that average people deaths during the bombing attacks. But here some points plot is not continuously plotted. Reason is some of the missing valued occurred in minimum deaths. So more time series analysis there must be analysis the maximum deaths during this period

```
plt.figure(figsize=(100,40))
plt.plot(df['S#'], df['Killed Max'], marker='o', linestyle='-', color='blue', label='Max Ki
plt.xlabel('Date bomb blasted')
plt.ylabel('Maximum people dead')
plt.title('People killed during time')
```

```
Text(0.5, 1.0, 'People killed during time')
```



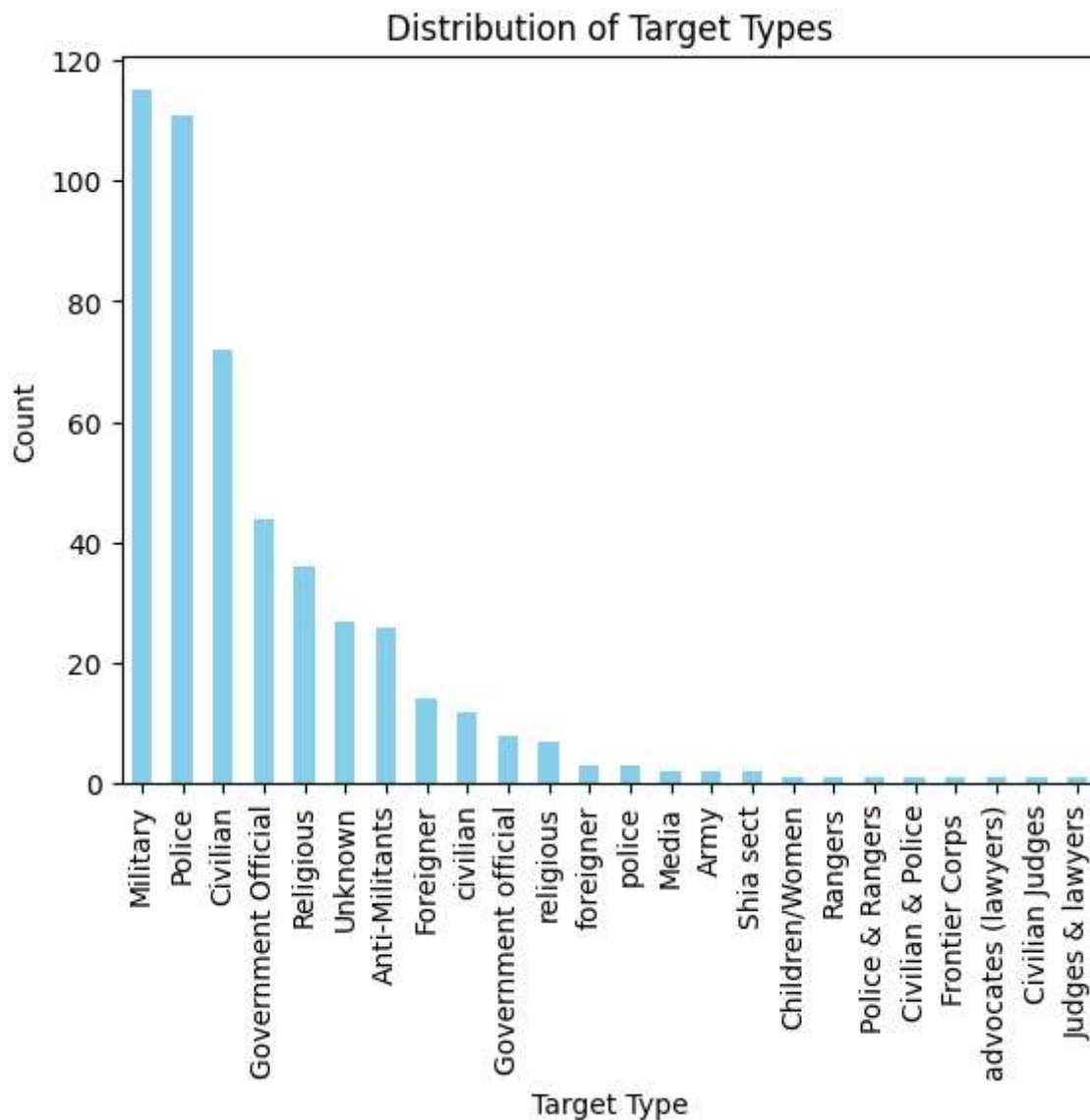
So there is no increasing or decreasing trend here. And this is an irregular, random pattern. So some of the controllable bombing attack situations can be identified in this plot.

```
# Fill missing values in the "Target Type" column with a specified value (e.g., 'Unknown')
df['Target Type'].fillna('Unknown', inplace=True)

# Plotting the bar graph
df['Target Type'].value_counts().plot(kind='bar', color='skyblue')

# Adding labels and title
plt.xlabel('Target Type')
plt.ylabel('Count')
plt.title('Distribution of Target Types')

# Displaying the bar graph
plt.show()
```



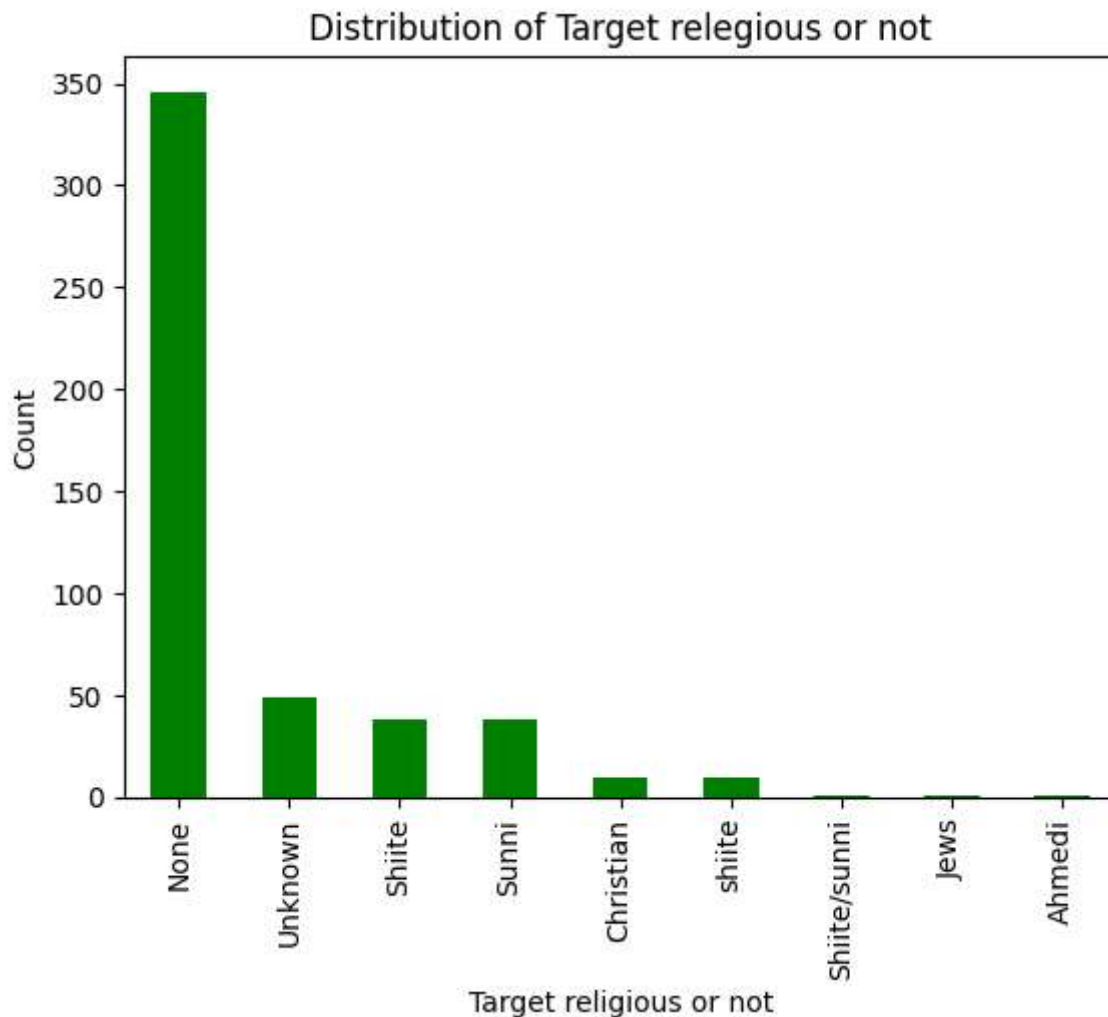
**In our comprehensive analysis, it becomes evident that terrorists exhibit a discernible pattern in their targeting strategies, demonstrating a marked focus on military and police personnel. Subsequently, their attention extends towards civilians. This pattern underscores a notable prioritization in their choice of targets, providing valuable insights into the dynamics of their operations. Understanding these trends is crucial for developing effective counterterrorism measures that can mitigate the impact on both military and civilian populations. This is very unstructured dataset and we can identify that Army bar coloum must be added to the militory and police coloum must be added to the Police coloumn. And shia sect coloumn must be added to the relegious coloumn. But our main conclusion is not being changed from this graph after changing that. **

```
# Fill missing values in the "Target if any" column with a specified value (e.g., 'Unknown')
df['Targeted Sect if any'].fillna('Unknown', inplace=True)

# Plotting the bar graph
df['Targeted Sect if any'].value_counts().plot(kind='bar', color='green')

# Adding labels and title
plt.xlabel('Target religious or not')
plt.ylabel('Count')
plt.title('Distribution of Target reeligious or not')

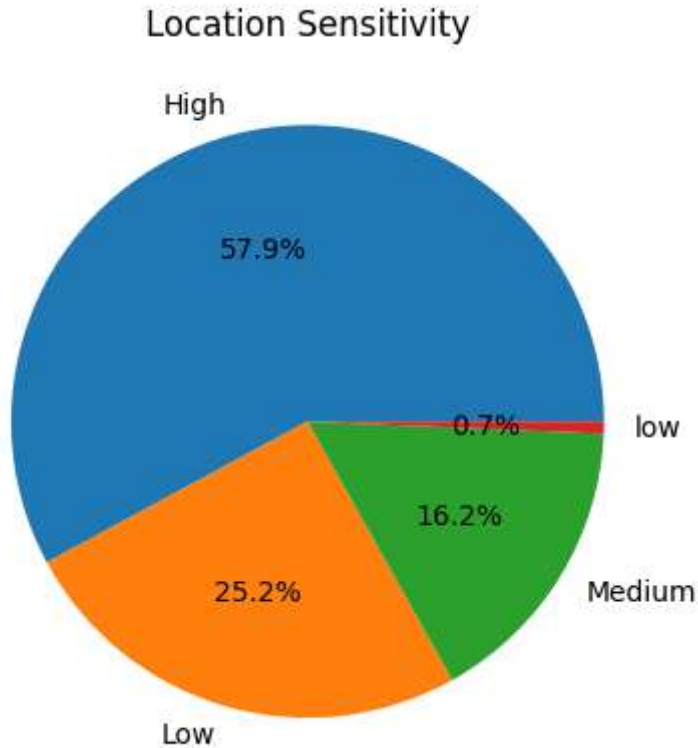
# Displaying the bar graph
plt.show()
```



Before observed that most bombing attackts targetted for militory and police. So again prove that they havent sharp target for reeligious situations to attack. If we drop None and Unkonwn (Unknown means missing values) if any type of religious target these terrorists have to about reeligious then that target have to sharp attencion goes to Shite and Sunni reeligious types. So we have to sharp attention for that.


```
# Create labels from the index of the value_counts() Series
labels = df['Location Sensitivity'].value_counts().index.to_list()

# Plot the pie chart
plt.title('Location Sensitivity')
plt.pie(df['Location Sensitivity'].value_counts().values, labels=labels, autopct='%1.1f%%')
plt.show()
```



Following a thorough analysis of the dataset, a discernible pattern emerges in the targeting strategies employed by terrorists. Predominantly, these actors focus their attacks on high-sensitivity areas, signifying locations of heightened strategic, symbolic, or economic importance. Notably, the data reveals that a significant proportion of attacks, approximately 57.5%, are concentrated in these high-sensitivity zones. Equally noteworthy is the observation that terrorists also direct their actions towards low-sensitivity areas, albeit to a lesser extent, constituting 25.9% of the total incidents. In contrast, attacks on areas categorized as medium sensitivity account for 16.2% of the overall occurrences. These findings shed light on the terrorists' deliberate selection of targets, emphasizing the need for comprehensive security measures tailored to the specific characteristics and vulnerabilities associated with each sensitivity level.

```
# Fill missing values in the "Location Category" column with a specified value (e.g., 'Unkn
df['Location Category'].fillna('Unknown', inplace=True)

# Plotting the bar graph
df['Location Category'].value_counts().plot(kind='bar', color='red')

# Adding labels and title
plt.xlabel('Location Category')
plt.ylabel('Frequency')
plt.title('Distribution of location cataegries')

# Displaying the bar graph
plt.show()
```

