

```
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
import seaborn as sns
```

```
conflict= pd.read_csv("fatalities.csv")
conflict
```

	name	date_of_event	age
0	'Abd a-Rahman Suleiman Muhammad Abu Daghash	2023-09-24	32.0
1	Usayed Farhan Muhammad 'Ali Abu 'Ali	2023-09-24	21.0
2	'Abdallah 'Imad Sa'ed Abu Hassan	2023-09-22	16.0
3	Durgham Muhammad Yihya al-Akhras	2023-09-20	19.0
4	Raafat 'Omar Ahmad Khamaisah	2023-09-19	15.0
...	...	...	...
11119	Binyamin Herling	2000-10-19	64.0
11120	Farid Musa 'Issa a-Nesasreh	2000-10-17	28.0
11121	Hillel Lieberman	2000-10-07	36.0
11122	Fahed Mustafa 'Odeh Baker	2000-10-07	21.0
11123	Wichlav Zalsevsky	2000-10-02	24.0

	citizenship	event_location	event_location_district	\
0	Palestinian	Nur Shams R.C.	Tulkarm	
1	Palestinian	Nur Shams R.C.	Tulkarm	
2	Palestinian	Kfar Dan	Jenin	
3	Palestinian	'Aqbat Jaber R.C.	Jericho	
4	Palestinian	Jenin R.C.	Jenin	
...	...	...	...	
11119	Israeli	Nablus	Nablus	
11120	Palestinian	Beit Furik	Nablus	
11121	Israeli	Nablus	Nablus	
11122	Palestinian	Bidya	Salfit	
11123	Israeli	Masha	Salfit	

	event_location_region	date_of_death	gender
0	West Bank	2023-09-24	M
NaN			
1	West Bank	2023-09-24	M

NaN				
2	West Bank	2023-09-22	M	
NaN				
3	West Bank	2023-09-20	M	
NaN				
4	West Bank	2023-09-19	M	
NaN				
...	...	...	...	
...				
11119	West Bank	2000-10-19	M	
Israelis				
11120	West Bank	2000-10-17	M	
Unknown				
11121	West Bank	2000-10-07	M	
Israelis				
11122	West Bank	2000-10-07	M	
No				
11123	West Bank	2000-10-02	M	
Israelis				
	place_of_residence	place_of_residence_district	type_of_injury	\
0	Nur Shams R.C.	Tulkarm	gunfire	
1	Nur Shams R.C.	Tulkarm	gunfire	
2	al-Yamun	Jenin	gunfire	
3	'Aqbat Jaber R.C.	Jericho	gunfire	
4	Jenin	Jenin	gunfire	
...	...	...	...	
11119	Kedumim	Tulkarm	gunfire	
11120	Beit Furik	Nablus	gunfire	
11121	Elon Moreh	Nablus	gunfire	
11122	Bidya	Salfit	gunfire	
11123	Ashdod	Israel	gunfire	
	ammunition	killed_by		\
0	live ammunition	Israeli security forces		
1	live ammunition	Israeli security forces		
2	live ammunition	Israeli security forces		
3	live ammunition	Israeli security forces		
4	live ammunition	Israeli security forces		
...	...	...		
11119	live ammunition	Palestinian civilians		
11120	NaN	Israeli civilians		
11121	live ammunition	Palestinian civilians		
11122	NaN	Israeli civilians		
11123	live ammunition	Palestinian civilians		
		notes		
0	Fatally shot by Israeli forces while standing ...			
1	Fatally shot by Israeli forces while trying to...			
2	Fatally shot by soldiers while firing at them ...			

```

3      Shot in the head by Israeli forces while throw...
4      Wounded by soldiers' gunfire after running awa...
...
11119      Killed while hiking on Mt. Eival.
11120      Killed by a settler from Itamar while harvesti...
11121      His body was found a day after he disappeared.
11122      Killed by settlers who rioted in Biddya village.
11123      NaN

[11124 rows x 16 columns]

```

## Data Preprocessing

```
conflict.head()
```

	name	date_of_event	age	\
0	'Abd a-Rahman Suleiman Muhammad Abu Daghash	2023-09-24	32.0	
1	Usayed Farhan Muhammad 'Ali Abu 'Ali	2023-09-24	21.0	
2	'Abdallah 'Imad Sa'ed Abu Hassan	2023-09-22	16.0	
3	Durgham Muhammad Yihya al-Akhras	2023-09-20	19.0	
4	Raafat 'Omar Ahmad Khamaisah	2023-09-19	15.0	

	citizenship	event_location	event_location_district	\
0	Palestinian	Nur Shams R.C.	Tulkarm	
1	Palestinian	Nur Shams R.C.	Tulkarm	
2	Palestinian	Kfar Dan	Jenin	
3	Palestinian	'Aqbat Jaber R.C.	Jericho	
4	Palestinian	Jenin R.C.	Jenin	

	event_location_region	date_of_death	gender	took_part_in_the_hostilities	\
0	West Bank	2023-09-24	M		
NaN					
1	West Bank	2023-09-24	M		
NaN					
2	West Bank	2023-09-22	M		
NaN					
3	West Bank	2023-09-20	M		
NaN					
4	West Bank	2023-09-19	M		
NaN					

	place_of_residence	place_of_residence_district	type_of_injury	\
0	Nur Shams R.C.	Tulkarm	gunfire	
1	Nur Shams R.C.	Tulkarm	gunfire	
2	al-Yamun	Jenin	gunfire	
3	'Aqbat Jaber R.C.	Jericho	gunfire	

```
4          Jenin          Jenin          gunfire
```

```
      ammunition      killed_by \
0  live ammunition  Israeli security forces
1  live ammunition  Israeli security forces
2  live ammunition  Israeli security forces
3  live ammunition  Israeli security forces
4  live ammunition  Israeli security forces
```

```
      notes
0  Fatally shot by Israeli forces while standing ...
1  Fatally shot by Israeli forces while trying to...
2  Fatally shot by soldiers while firing at them ...
3  Shot in the head by Israeli forces while throw...
4  Wounded by soldiers' gunfire after running awa...
```

```
conflict.info()
```

```
<class 'pandas.core.frame.DataFrame'>
```

```
RangeIndex: 11124 entries, 0 to 11123
```

```
Data columns (total 16 columns):
```

#	Column	Non-Null Count	Dtype
0	name	11124 non-null	object
1	date_of_event	11124 non-null	object
2	age	10995 non-null	float64
3	citizenship	11124 non-null	object
4	event_location	11124 non-null	object
5	event_location_district	11124 non-null	object
6	event_location_region	11124 non-null	object
7	date_of_death	11124 non-null	object
8	gender	11104 non-null	object
9	took_part_in_the_hostilities	9694 non-null	object
10	place_of_residence	11056 non-null	object
11	place_of_residence_district	11056 non-null	object
12	type_of_injury	10833 non-null	object
13	ammunition	5871 non-null	object
14	killed_by	11124 non-null	object
15	notes	10844 non-null	object

```
dtypes: float64(1), object(15)
```

```
memory usage: 1.4+ MB
```

```
conflict.describe()
```

	age
count	10995.000000
mean	26.745703
std	13.780548
min	1.000000
25%	19.000000

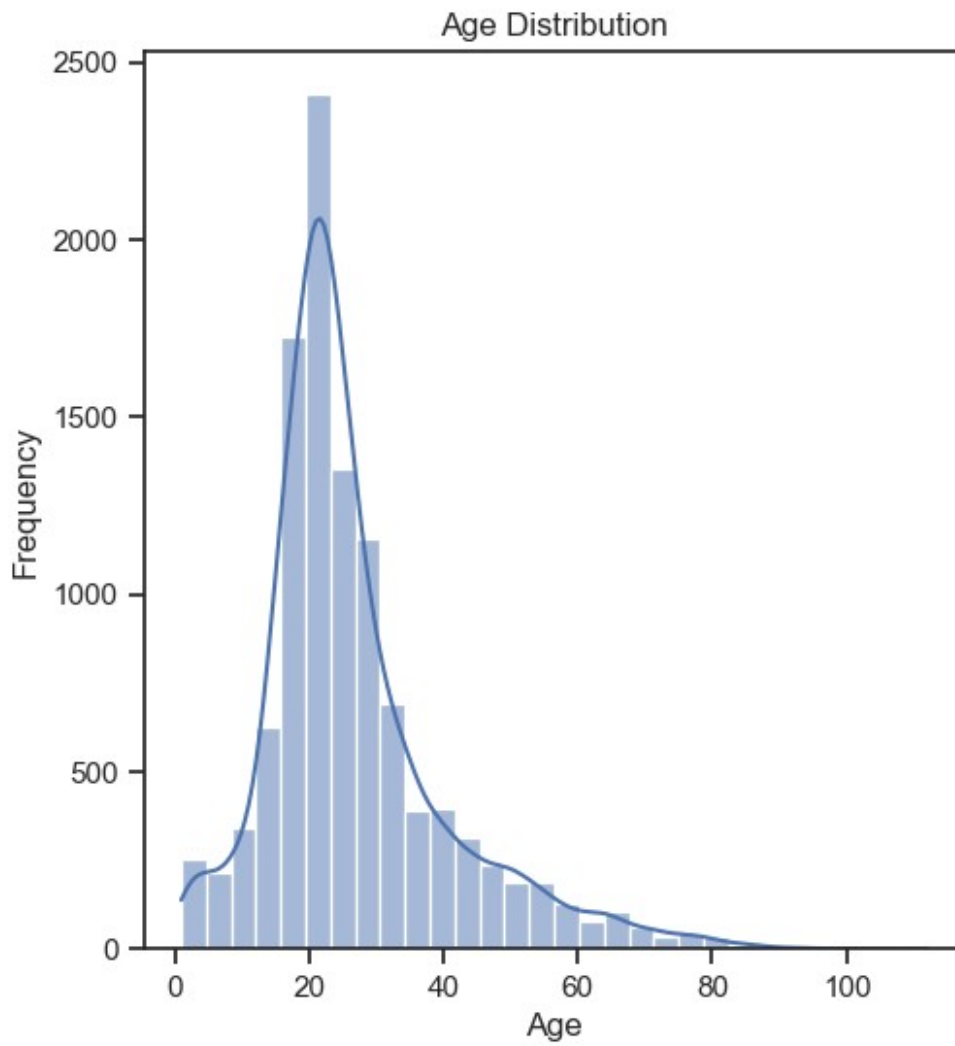
50%	23.000000
75%	31.000000
max	112.000000

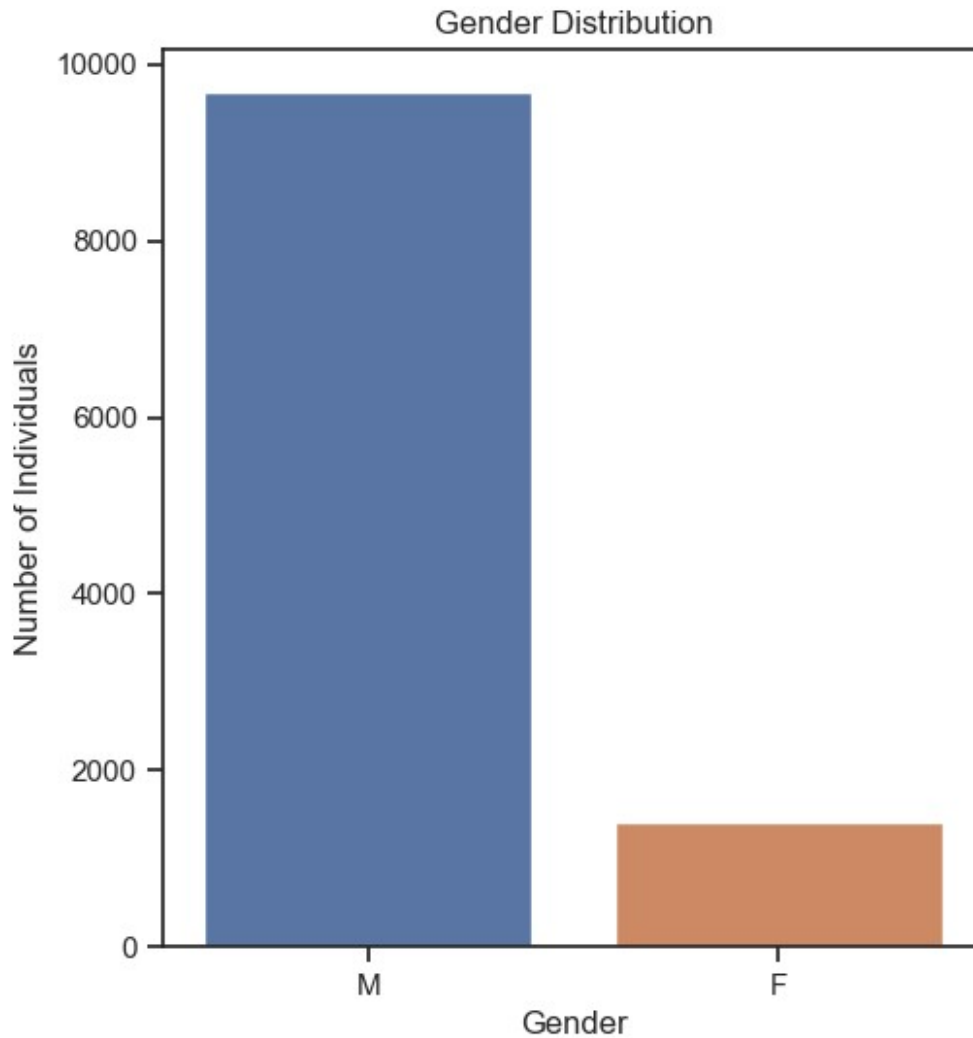
*#Checking Age column as Normal or not.*

```
sns.set()
sns.set(style="ticks")
plt.figure(figsize=(12, 6))
plt.subplot(1, 2, 1)
ax = sns.histplot(conflict['age'], bins=30, kde=True) #Plotting Histogram for age
ax.set(xlabel='Age', ylabel='Frequency', title='Age Distribution')
```

*#Checking Skewness towards one gender*

```
plt.figure(figsize=(12, 6))
plt.subplot(1, 2, 2)
ax= sns.countplot(x='gender', data=conflict) # Plotting bar chart for gender
ax.set(xlabel='Gender', ylabel='Number of Individuals', title='Gender Distribution')
plt.show()
```





```
#Filling Null values in Age and Gender Column
conflict['age'].fillna(conflict['age'].median(), inplace=True)
conflict['gender'].fillna(conflict['gender'].mode()[0], inplace=True)

conflict.isnull().sum()
```

name	0
date_of_event	0
age	0
citizenship	0
event_location	0
event_location_district	0
event_location_region	0
date_of_death	0
gender	0
took_part_in_the_hostilities	1430
place_of_residence	68
place_of_residence_district	68

type_of_injury	291
ammunition	5253
killed_by	0
notes	280
dtype: int64	

## Q1- Identify the trends in Fatalities over Time

```
# Checking the range of dates (Fatalities)
```

```
print("\nRange of dates:")  
print(f"Minimum Date: {conflict['date_of_event'].min()}")  
print(f"Maximum Date: {conflict['date_of_event'].max()}")
```

Range of dates:

Minimum Date: 2000-10-02

Maximum Date: 2023-09-24

```
#Converting to datetime format
```

```
conflict['date_of_event']= pd.to_datetime(conflict['date_of_event'])
```

```
#Time Series Analysis (On monthly basis)
```

```
time_Series= conflict.set_index('date_of_event')
```

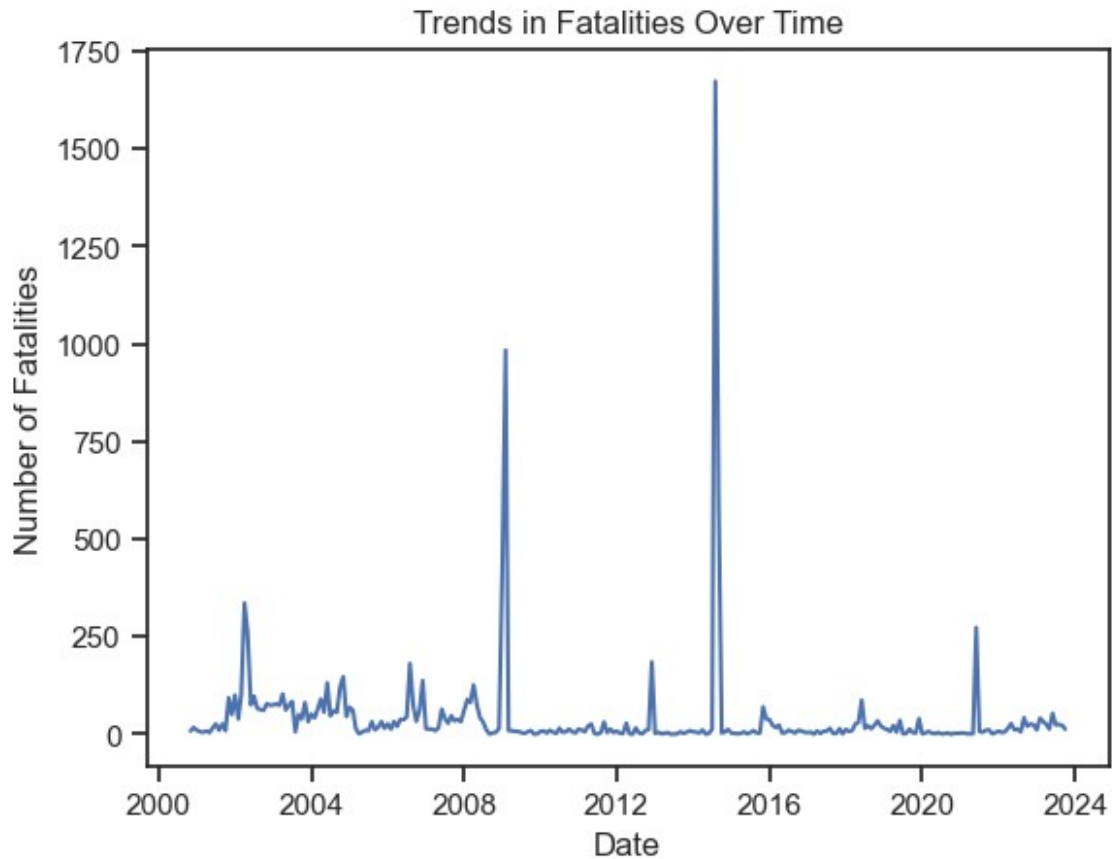
```
['name'].resample('M').count()
```

```
ax= sns.lineplot(x=time_Series.index, y=time_Series)
```

```
ax.set(xlabel='Date', ylabel='Number of Fatalities', title='Trends in  
Fatalities Over Time')
```

```
plt.show()
```





```
#Analysing the trend in Fatalities with Time series plot
time_Series = conflict.set_index('date_of_event')
['name'].resample('M').count()

#Calculating the threshold value for Spikes and Declines
mean_fatal = time_Series.mean()
std_fatal = time_Series.std()
threshold = mean_fatal + 2*std_fatal

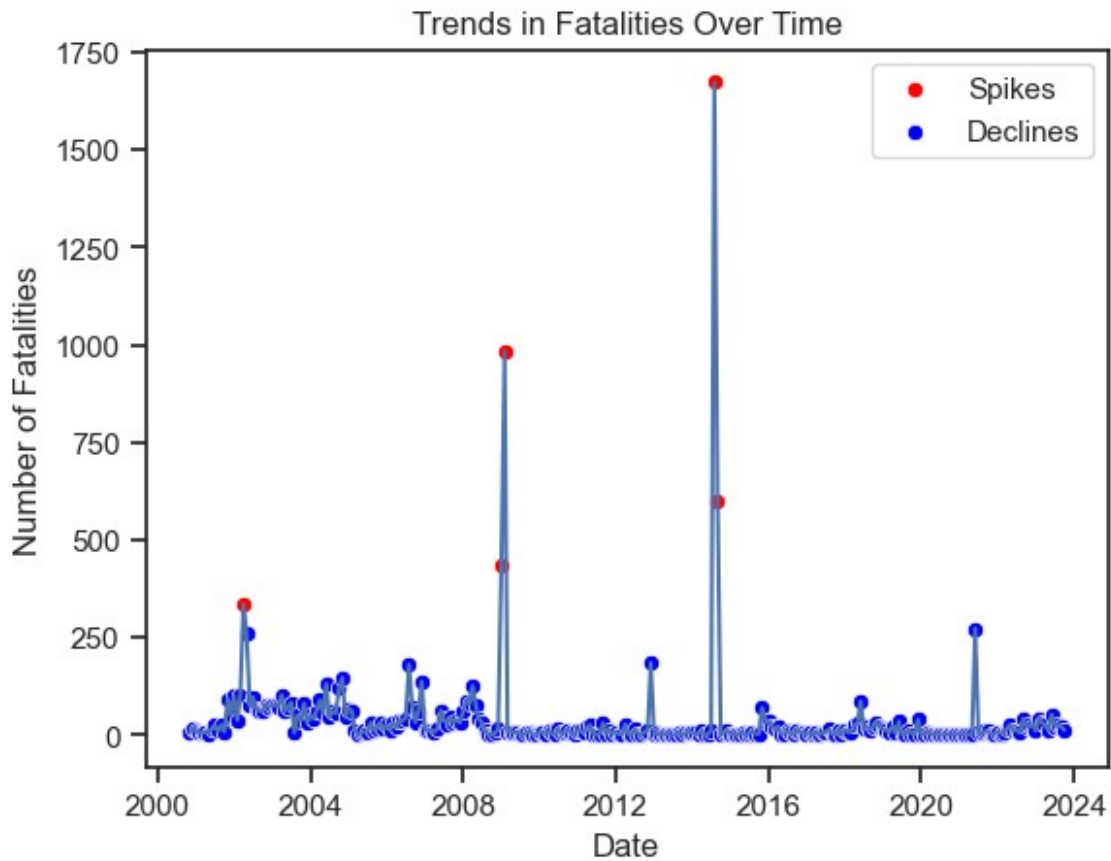
ax= sns.lineplot(x=time_Series.index, y=time_Series)

#Scatterplot for Spikes
spikes = time_Series[time_Series > threshold]
sns.scatterplot(x=spikes.index, y=spikes, color='red', label='Spikes')

#Scatterplot for declines
declines = time_Series[time_Series < threshold]
sns.scatterplot(x=declines.index, y=declines, color='blue',
label='Declines')

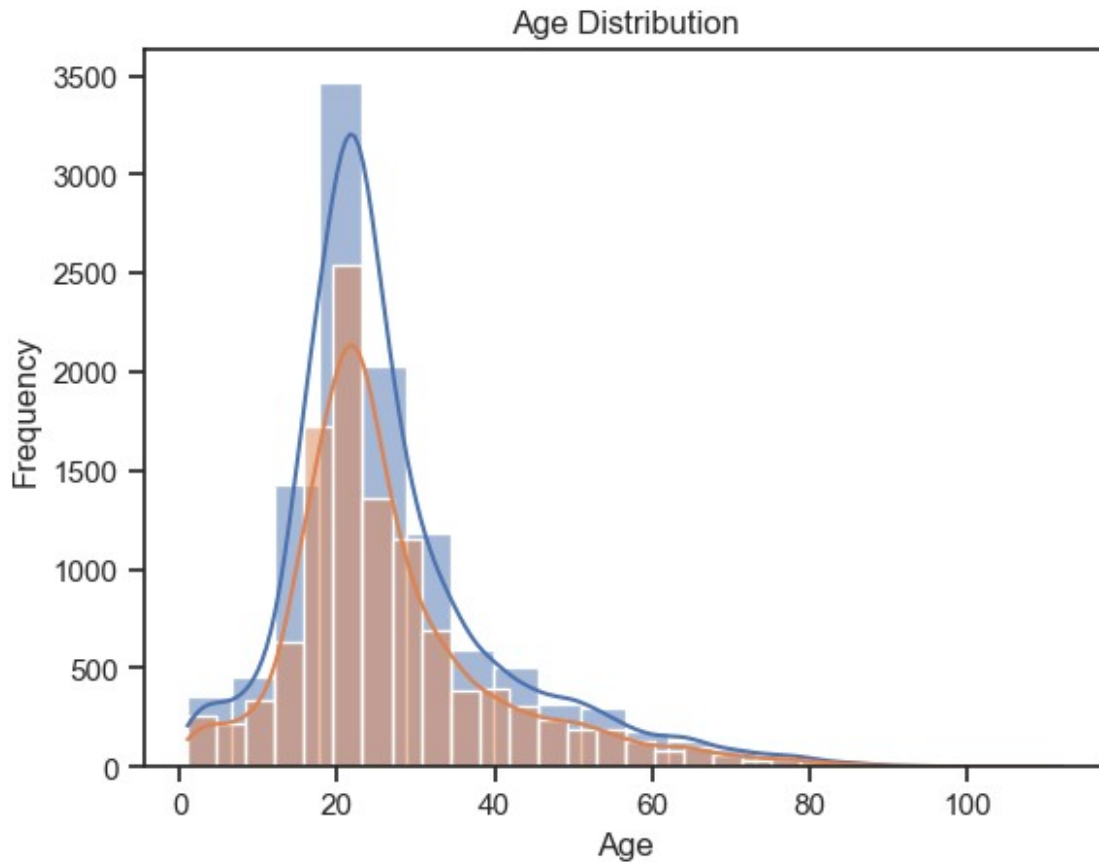
ax.set(xlabel='Date', ylabel='Number of Fatalities', title='Trends in
Fatalities Over Time')
```

```
plt.legend()  
plt.show()
```



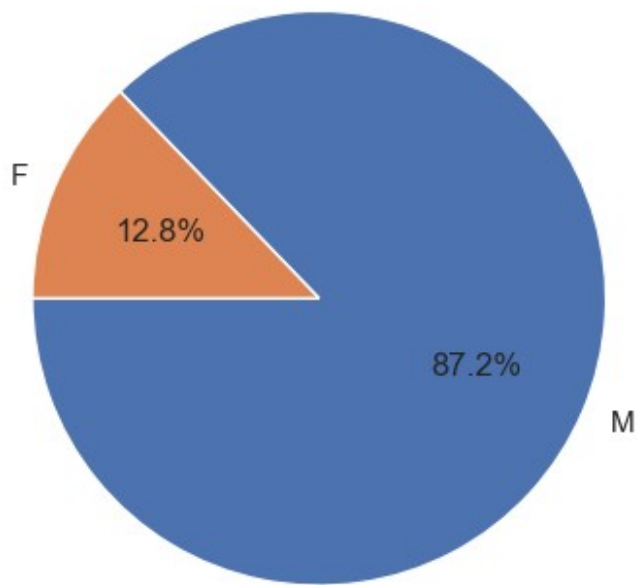
## Q2-Examining age,gender,and citizenship of Individuals Killed

```
# Analysing the Age Distribution with Histogram  
sns.histplot(conflict['age'], bins=20, kde=True)  
ax = sns.histplot(conflict['age'], bins=30,kde=True) #Plotting  
Histogram for age  
ax.set(xlabel='Age', ylabel='Frequency', title='Age Distribution')  
plt.show()
```

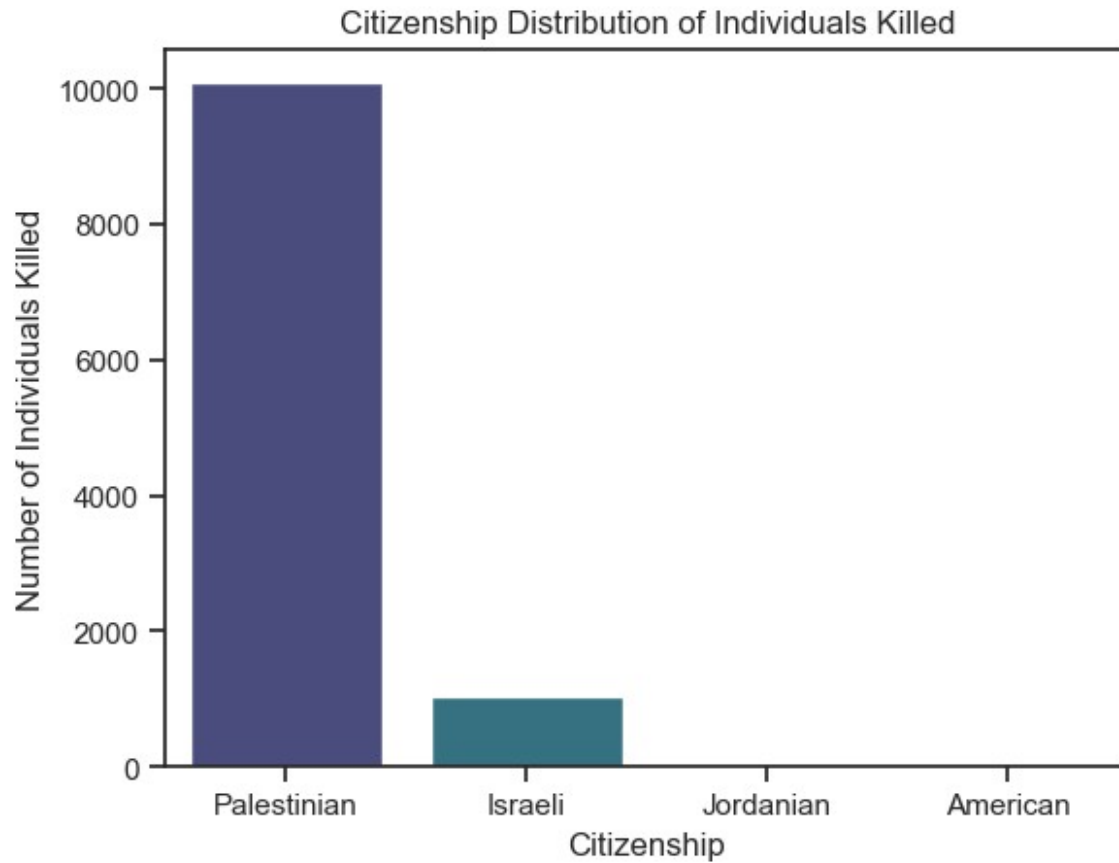


```
# Analysing Gender distribution with Pie chart
gender_counts = conflict['gender'].value_counts()
plt.pie(gender_counts, labels=gender_counts.index, autopct='%1.1f%%',
startangle=180)
plt.title('Gender Distribution of Individuals Killed')
plt.show()
```

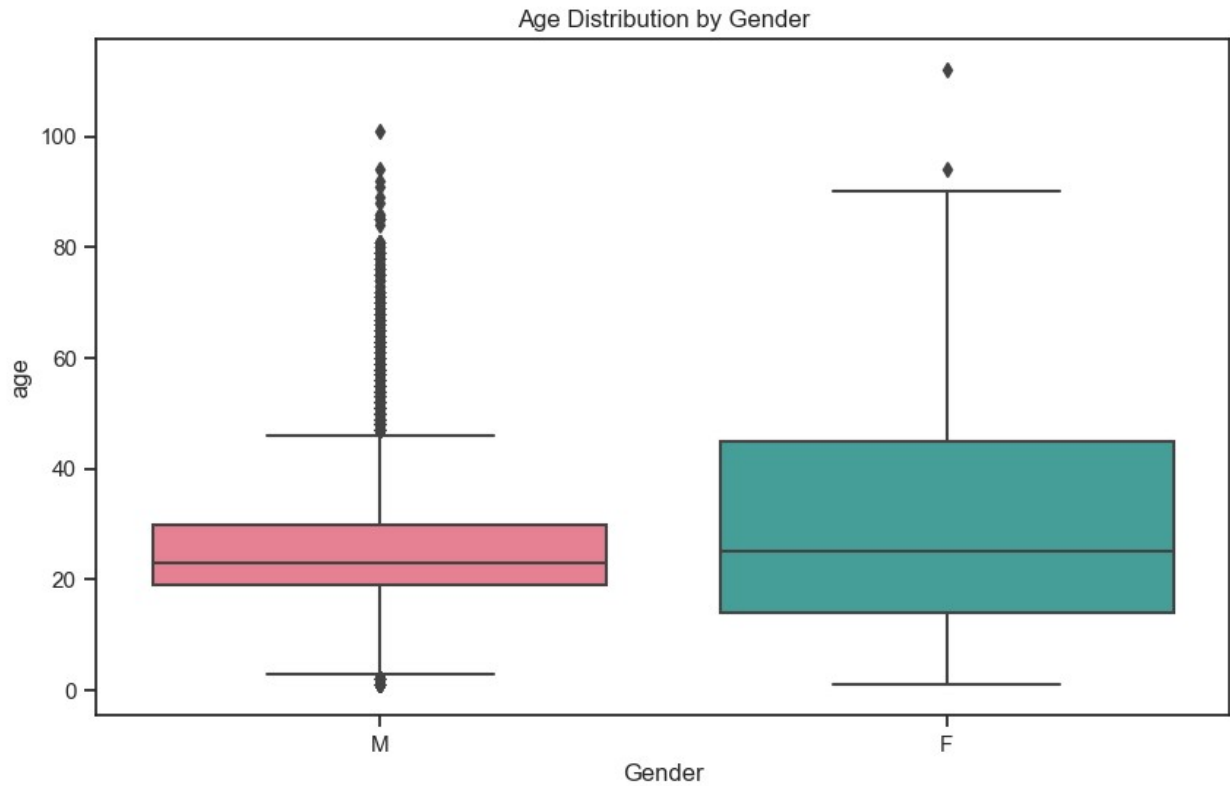
Gender Distribution of Individuals Killed



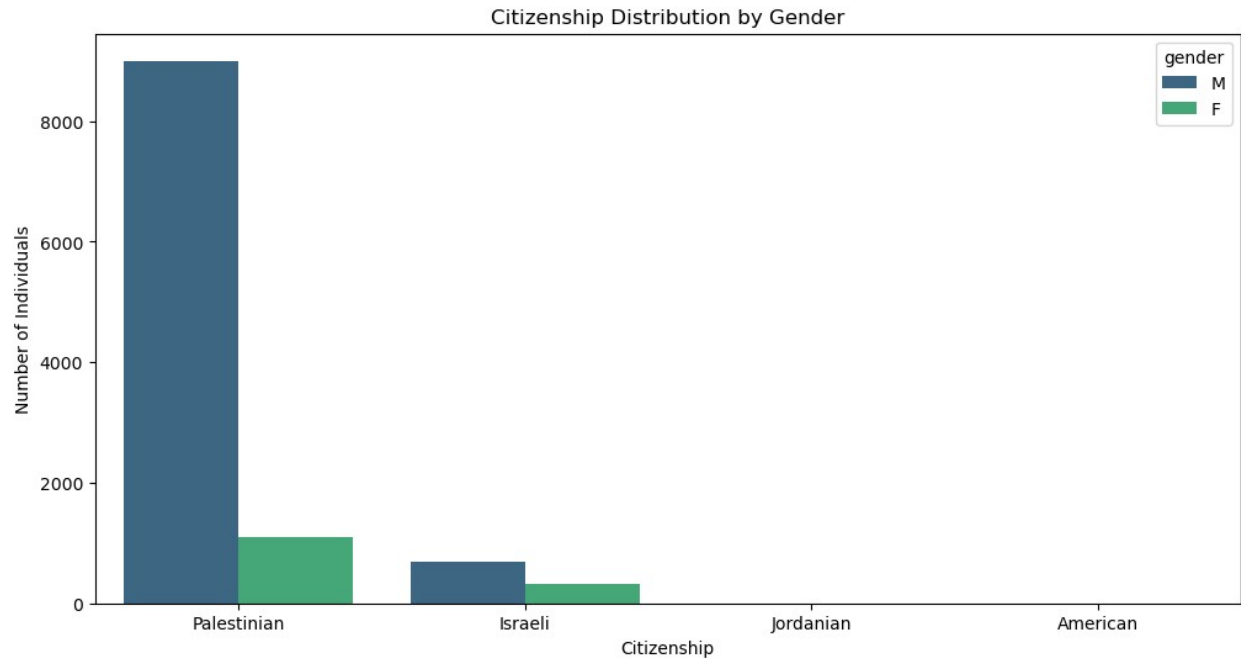
```
# Analysing Citizenship distribution with bar chart
citizenship_counts = conflict['citizenship'].value_counts()
ax = sns.barplot(x=citizenship_counts.index,
y=citizenship_counts.values, palette='viridis')
ax.set(xlabel='Citizenship', ylabel='Number of Individuals Killed',
        title='Citizenship Distribution of Individuals Killed')
plt.show()
```



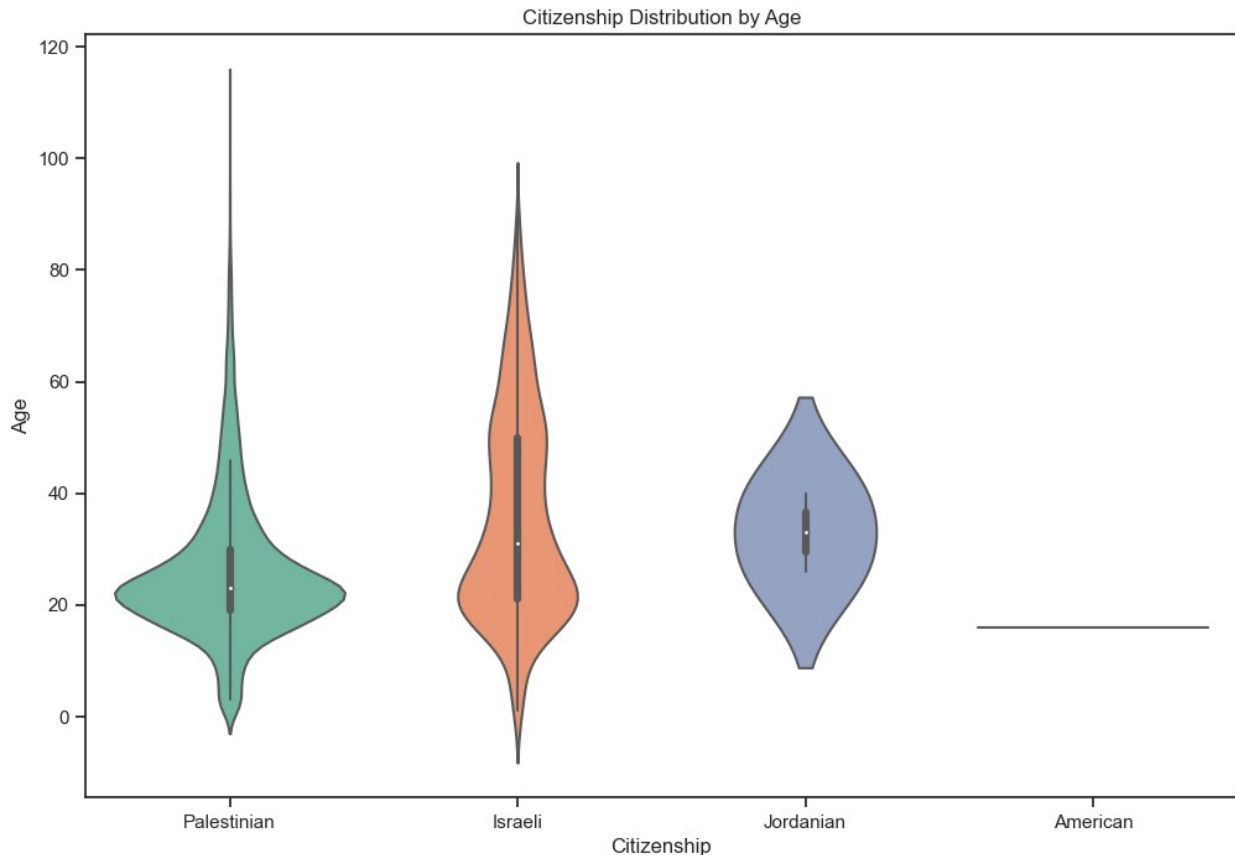
```
# Analyzing disparities using Boxplot for age distribution by gender  
plt.figure(figsize=(10, 6))  
ax = sns.boxplot(x='gender', y='age', data=conflict, palette='husl')  
ax.set(xlabel='Gender', ylabel='age', title='Age Distribution by  
Gender')  
plt.show()
```



```
# Analyzing disparities using countplot for citizenship distribution by gender
plt.figure(figsize=(12, 6))
ax = sns.countplot(x='citizenship', hue='gender', data=conflict,
palette='viridis')
ax.set(xlabel='Citizenship', ylabel='Number of Individuals',
title='Citizenship Distribution by Gender')
plt.show()
```



```
# Analyzing disparities using Violin plot for citizenship distribution by age  
plt.figure(figsize=(12, 8))  
ax = sns.violinplot(x='citizenship', y='age', data=conflict,  
palette='Set2')  
ax.set(xlabel='Citizenship', ylabel='Age', title='Citizenship  
Distribution by Age')  
plt.show()
```



## Q-3 Indentify Areas have Higher Levels of Violence

```
# Total counts Category wise in Region Column
conflict['event_location_region'].value_counts()

Gaza Strip      7733
West Bank      2712
Israel          679
Name: event_location_region, dtype: int64

# Total counts Category wise in District Column
conflict['event_location_district'].value_counts()

Gaza            2435
North Gaza     1910
Khan Yunis     1394
Rafah          1066
Deir al-Balah  854
Israel          679
Nablus         647
```



Jenin	512
Ramallah and al-Bira	350
Hebron	347
Tulkarm	254
Bethlehem	186
East Jerusalem	130
al-Quds	85
Gush Katif	70
Qalqiliya	65
Tubas	52
Jericho	48
Salfit	36
Gaza Strip	4

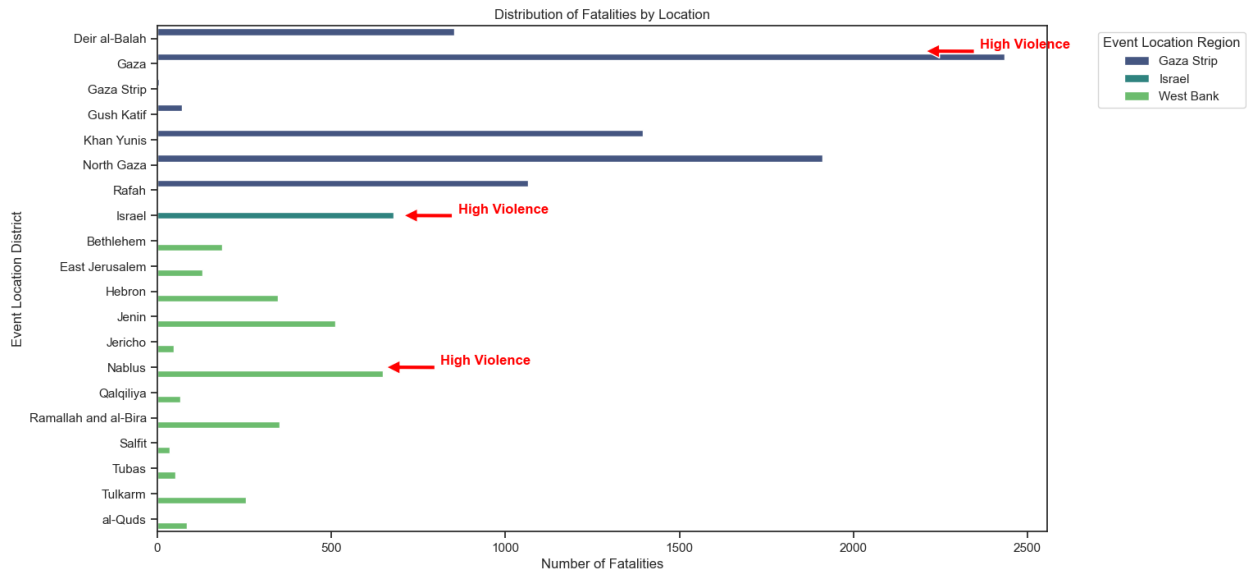
Name: event\_location\_district, dtype: int64

```
# Applying Group by on District and Region wise
location_counts = conflict.groupby(['event_location_region',
'event_location_district']).size().reset_index(name='fatalities_count'
)
```

```
# Plotting Bar chart for Fatalities Distribution
plt.figure(figsize=(14, 8))
ax = sns.barplot(x='fatalities_count', y='event_location_district',
hue='event_location_region', data=location_counts, dodge=True,
palette='viridis')
ax.set(xlabel='Number of Fatalities', ylabel='Event Location
District', title='Distribution of Fatalities by Location')
plt.legend(title='Event Location Region', bbox_to_anchor=(1.05, 1),
loc='upper left')
```

```
# Adding Indicators on Region where High Violence exist
annotations = [
    {'label': 'High Violence', 'xy': (2200, 0.5), 'xytext': (50, 2)},
    {'label': 'High Violence', 'xy': (700, 7), 'xytext': (50, 2)},
    {'label': 'High Violence', 'xy': (650, 13), 'xytext': (50, 2)}
]
```

```
for annotation in annotations:
    plt.annotate(annotation['label'], xy=annotation['xy'],
xytext=annotation['xytext'], textcoords='offset points',
                arrowprops=dict(facecolor='red', shrink=0.05),
color='red', fontsize=12, weight='bold')
plt.show()
```



## Q 4

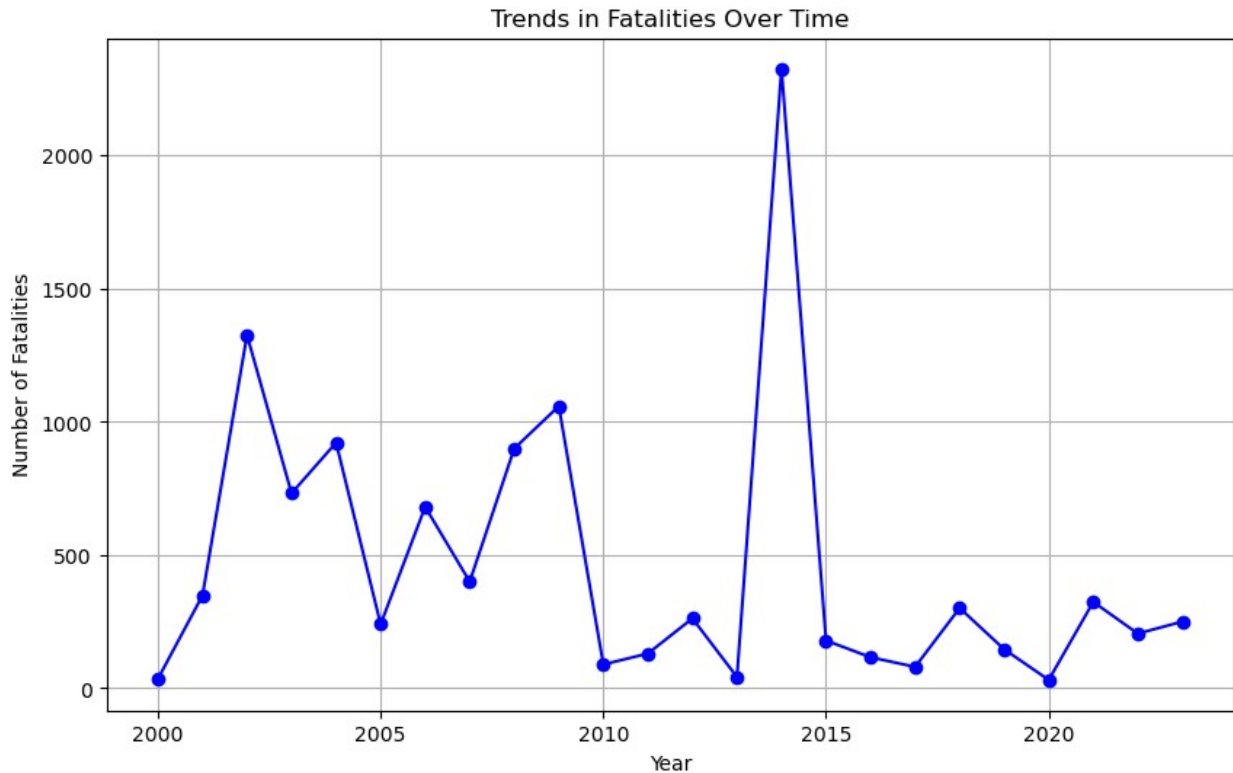
Group by year and calculate the sum of fatalities for each year

```
conflict['date_of_death'] = pd.to_datetime(conflict['date_of_death'],
errors='coerce')
```

```
fatalities_over_time =
conflict.groupby(conflict['date_of_death'].dt.year)['name'].count()
```

*# Plotting the trends*

```
plt.figure(figsize=(10, 6))
fatalities_over_time.plot(kind='line', marker='o', linestyle='--',
color='b')
plt.title('Trends in Fatalities Over Time')
plt.xlabel('Year')
plt.ylabel('Number of Fatalities')
plt.grid(True)
plt.show()
```



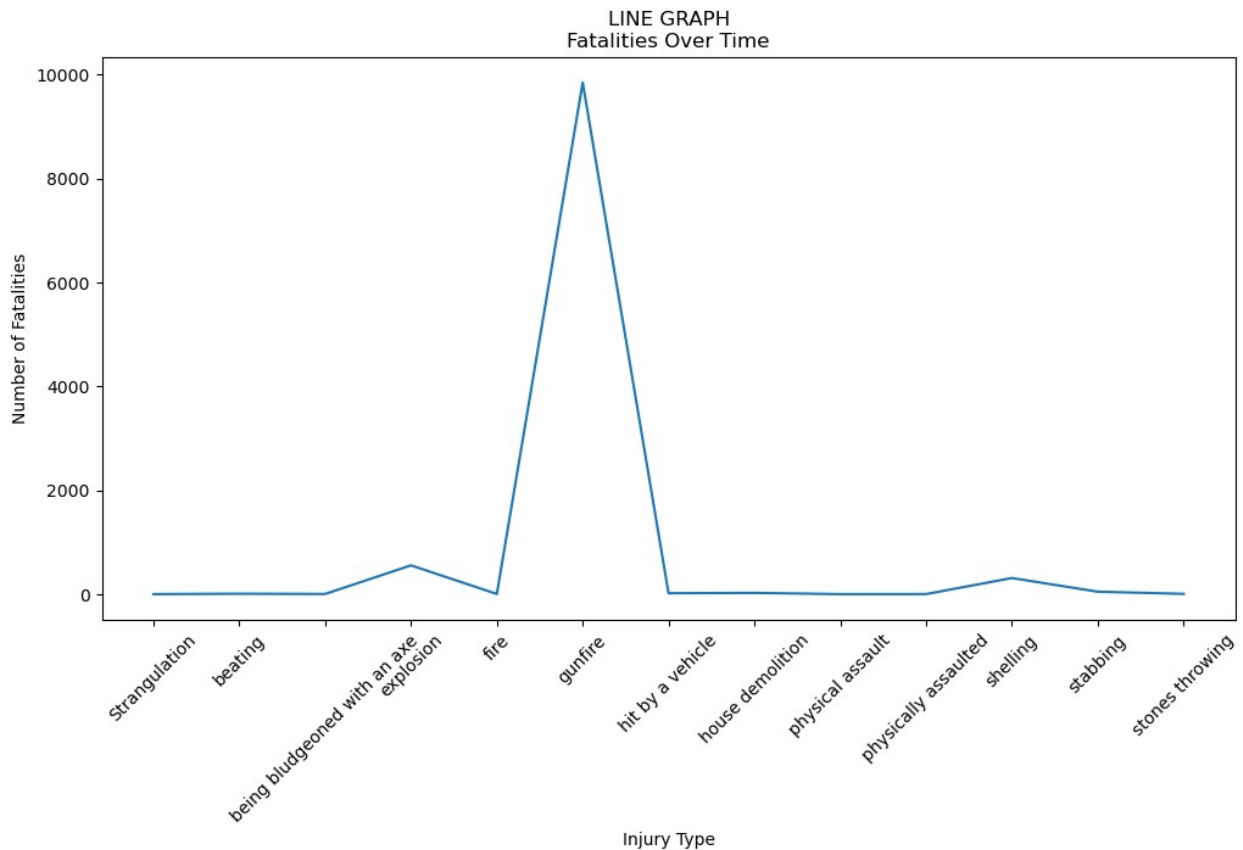
group the data by injuries

```
fatalities_by_injury =
conflict.groupby('type_of_injury').size().reset_index(name='fatalities
_count')
print(fatalities_by_injury)
```

```
plt.figure(figsize=(12, 6))
plt.plot(fatalities_by_injury['type_of_injury'],
fatalities_by_injury['fatalities_count'])
plt.title('\nLINE GRAPH\nFatalities Over Time')
plt.xlabel('Injury Type')
plt.ylabel('Number of Fatalities')
plt.xticks(rotation=45)
print(plt.show())
```

	type_of_injury	fatalities_count
0	Strangulation	1
1	beating	9
2	being bludgeoned with an axe	4
3	explosion	555
4	fire	4
5	gunfire	9849
6	hit by a vehicle	18
7	house demolition	25
8	physical assault	1

9	physically assaulted	2
10	shelling	311
11	stabbing	48
12	stones throwing	6



None

Severity distribution for each injury.

```

conflict['type_of_injury'].fillna(conflict['type_of_injury'].mode()[0], inplace=True)
conflict['ammunition'].fillna(conflict['ammunition'].mode()[0], inplace=True)
conflict['age'].fillna(conflict['age'].median(), inplace=True)
nan_count_age = conflict['age'].isnull().sum()
print("Number of NaN values in 'age' column after handling null values:", nan_count_age)

conflict['severity'] = conflict['notes'].apply(lambda x: 'High' if 'serious' in str(x).lower() else 'Low')

common_injuries = conflict['type_of_injury'].value_counts()

```

```

print("Most Common Types of Injuries:")
print(common_injuries)

plt.figure(figsize=(10, 6))
conflict.groupby('type_of_injury')
['severity'].value_counts().unstack().plot(kind='bar', stacked=True)
plt.title('Assessment of Severity for Each Type of Injury')
plt.xlabel('Type of Injury')
plt.ylabel('Count')
plt.show()

```

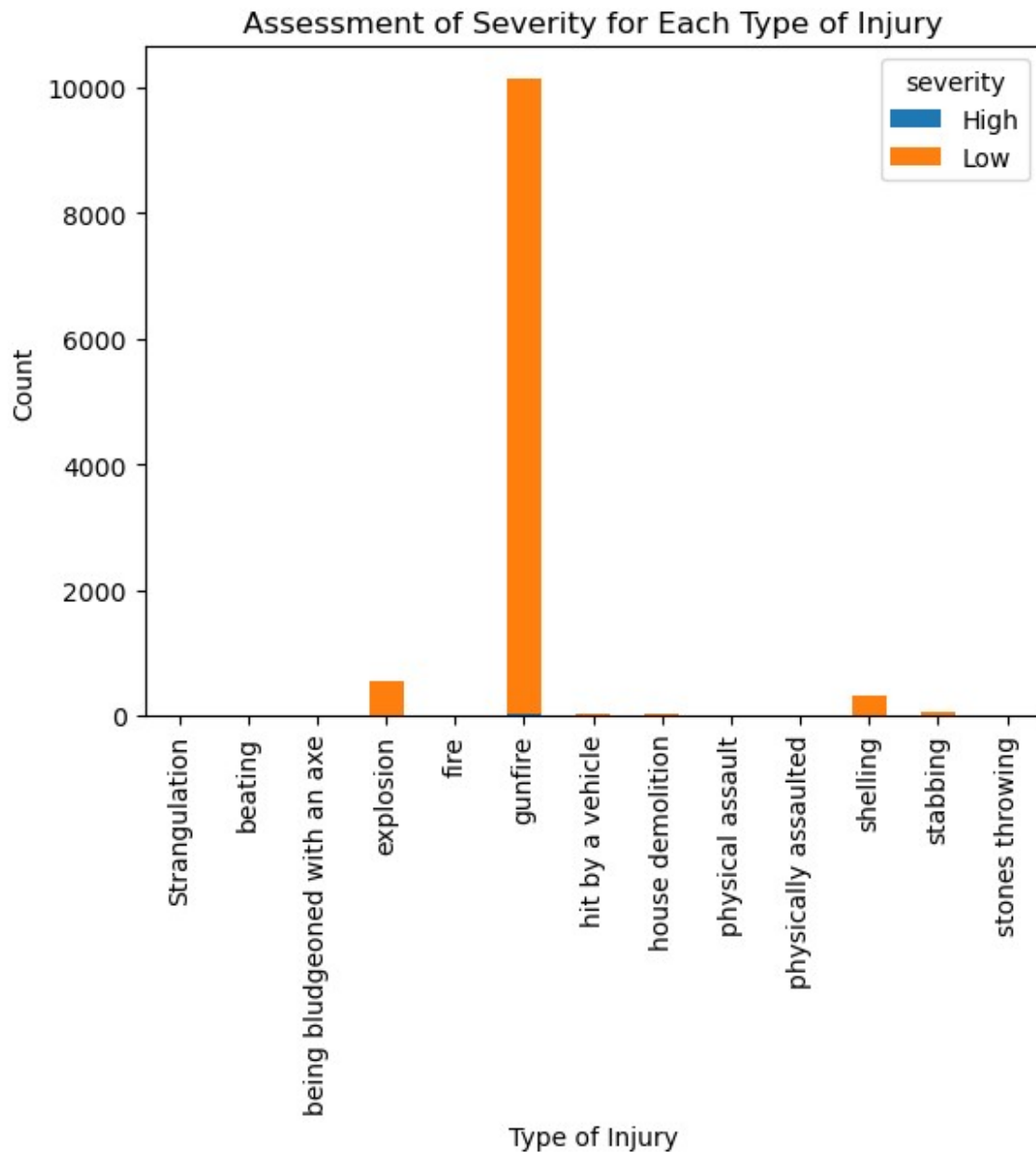
Number of NaN values in 'age' column after handling null values: 0

Most Common Types of Injuries:

gunfire	10140
explosion	555
shelling	311
stabbing	48
house demolition	25
hit by a vehicle	18
beating	9
stones throwing	6
being bludgeoned with an axe	4
fire	4
physically assaulted	2
physical assault	1
Strangulation	1

Name: type\_of\_injury, dtype: int64

<Figure size 1000x600 with 0 Axes>



Visualizing impact of means of death

```
common_ammunition = conflict['ammunition'].value_counts()

print("Most Common Types of Ammunition:")
print(common_ammunition)

common_means_of_death = conflict['killed_by'].value_counts()

print("\nMost Common Means of Death:")
print(common_means_of_death)
```

```

impact_evaluation = conflict.groupby('killed_by')
['type_of_injury'].value_counts().unstack().fillna(0)
impact_evaluation['Total'] = impact_evaluation.sum(axis=1)
impact_evaluation = impact_evaluation.sort_values(by='Total',
ascending=False)

```

```

print("\nImpact Evaluation of Means of Death:")
print(impact_evaluation)

```

```

plt.figure(figsize=(10, 6))
impact_evaluation['Total'].plot(kind='bar', color='salmon')
plt.title('Impact Evaluation of Means of Death')
plt.xlabel('Means of Death')
plt.ylabel('Total Impact (Frequency)')
plt.show()

```

Most Common Types of Ammunition:

missile	8130
live ammunition	1514
shell	675
explosive belt	326
bomb	249
mortar fire	51
knife	37
flechette shells	22
rubber-coated metal bullets	19
0.22-caliber bullets	16
phosphorus shell	16
Qassam rocket	15
car bomb	15
teargas canister	13
rocket	12
grad rocket	7
sponge rounds	2
grenade	2
flare bomb	1
stun grenade	1
rock	1

Name: ammunition, dtype: int64

Most Common Means of Death:

Israeli security forces	10000
Palestinian civilians	1028
Israeli civilians	96

Name: killed\_by, dtype: int64

Impact Evaluation of Means of Death:

type_of_injury	Strangulation	beating	being bludgeoned with an axe
----------------	---------------	---------	------------------------------

killed\_by

Israeli security forces	0.0	5.0
0.0		
Palestinian civilians	1.0	4.0
4.0		
Israeli civilians	0.0	0.0
0.0		

type_of_injury	explosion	fire	gunfire	hit by a vehicle	\
----------------	-----------	------	---------	------------------	---

killed_by					
Israeli security forces	47.0	1.0	9606.0	3.0	
Palestinian civilians	508.0	0.0	448.0	14.0	
Israeli civilians	0.0	3.0	86.0	1.0	

type_of_injury	house demolition	physical assault	\
----------------	------------------	------------------	---

killed_by			
Israeli security forces	25.0	0.0	
Palestinian civilians	0.0	1.0	
Israeli civilians	0.0	0.0	

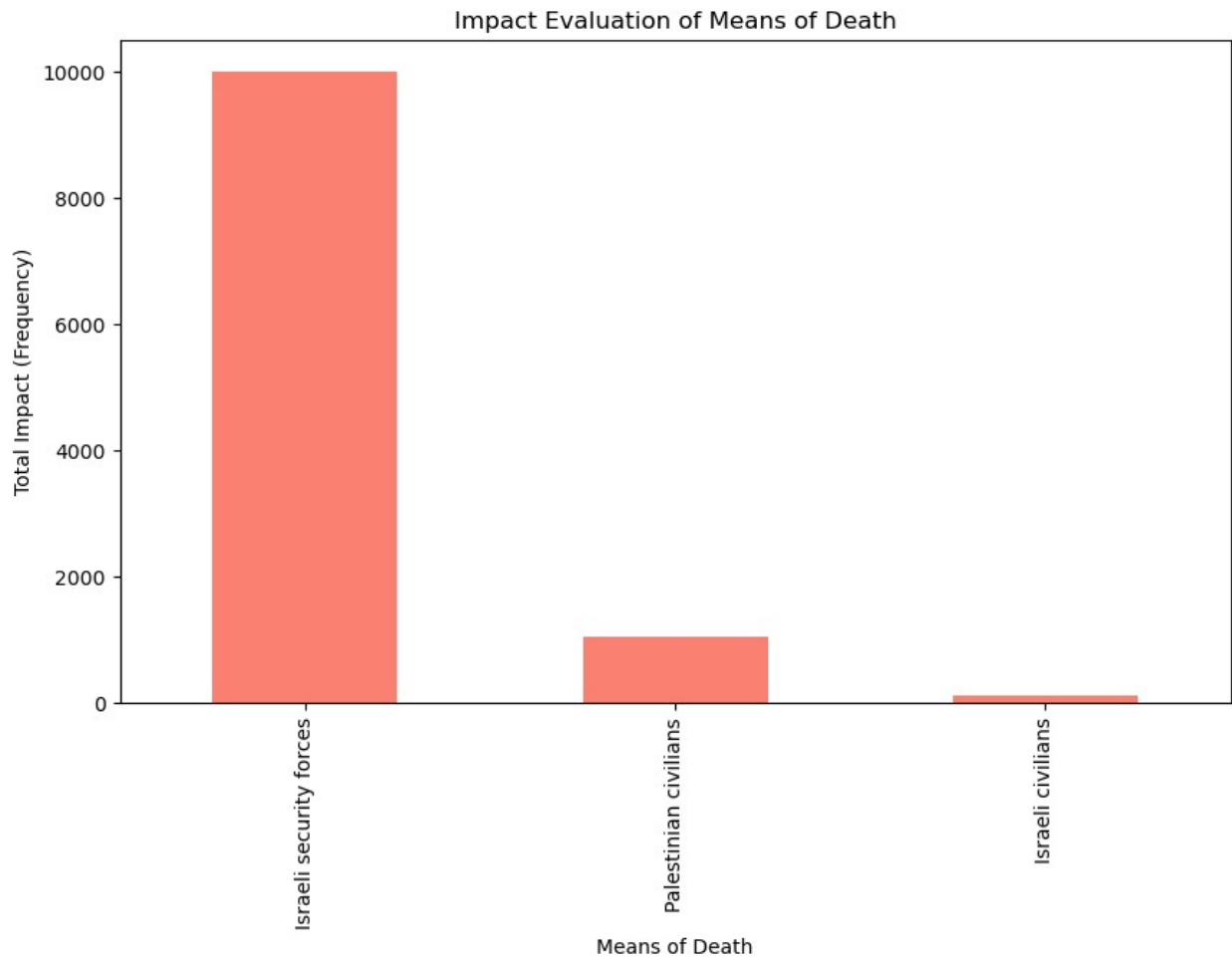
type_of_injury	physically assaulted	shelling	stabbing	\
----------------	----------------------	----------	----------	---

killed_by				
Israeli security forces	1.0	311.0	1.0	
Palestinian civilians	1.0	0.0	43.0	
Israeli civilians	0.0	0.0	4.0	

type_of_injury	stones throwing	Total
----------------	-----------------	-------

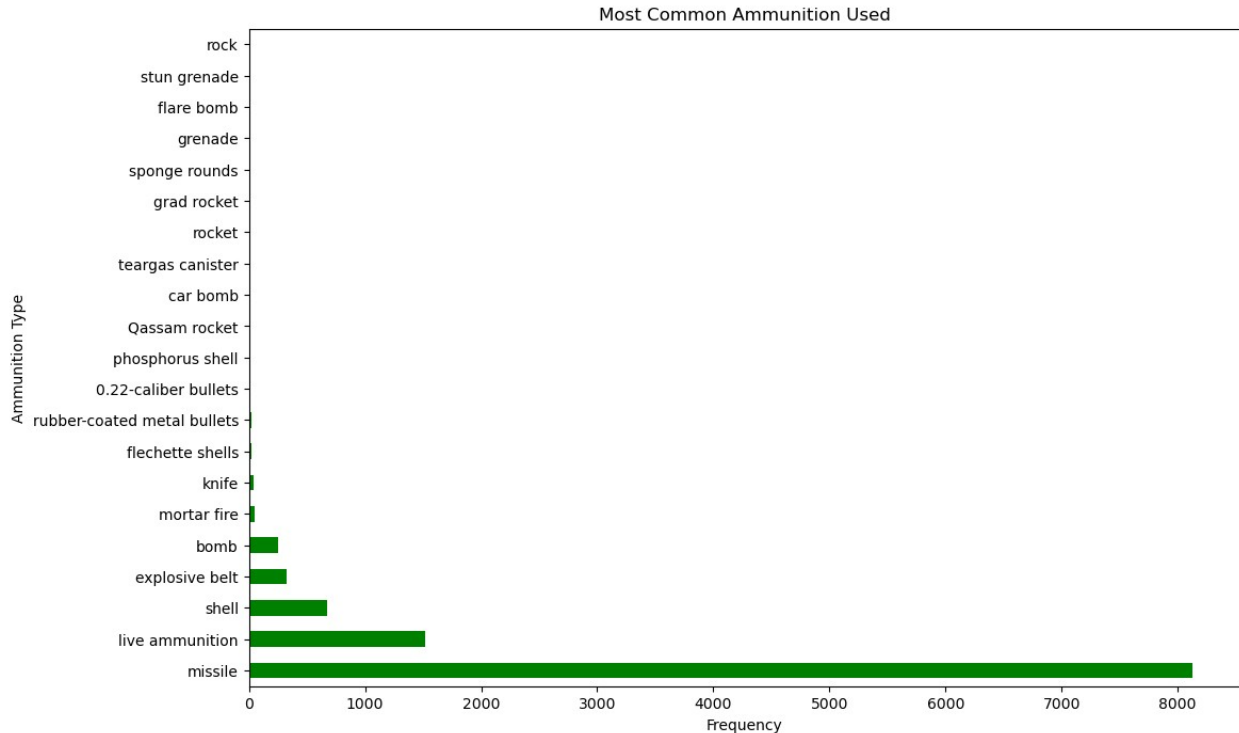
killed_by		
Israeli security forces	0.0	10000.0
Palestinian civilians	4.0	1028.0
Israeli civilians	2.0	96.0





### Most Common Ammunition Used

```
plt.figure(figsize=(12, 8))
conflict['ammunition'].value_counts().plot(kind='barh', color='green')
plt.title('Most Common Ammunition Used')
plt.xlabel('Frequency')
plt.ylabel('Ammunition Type')
plt.show()
```



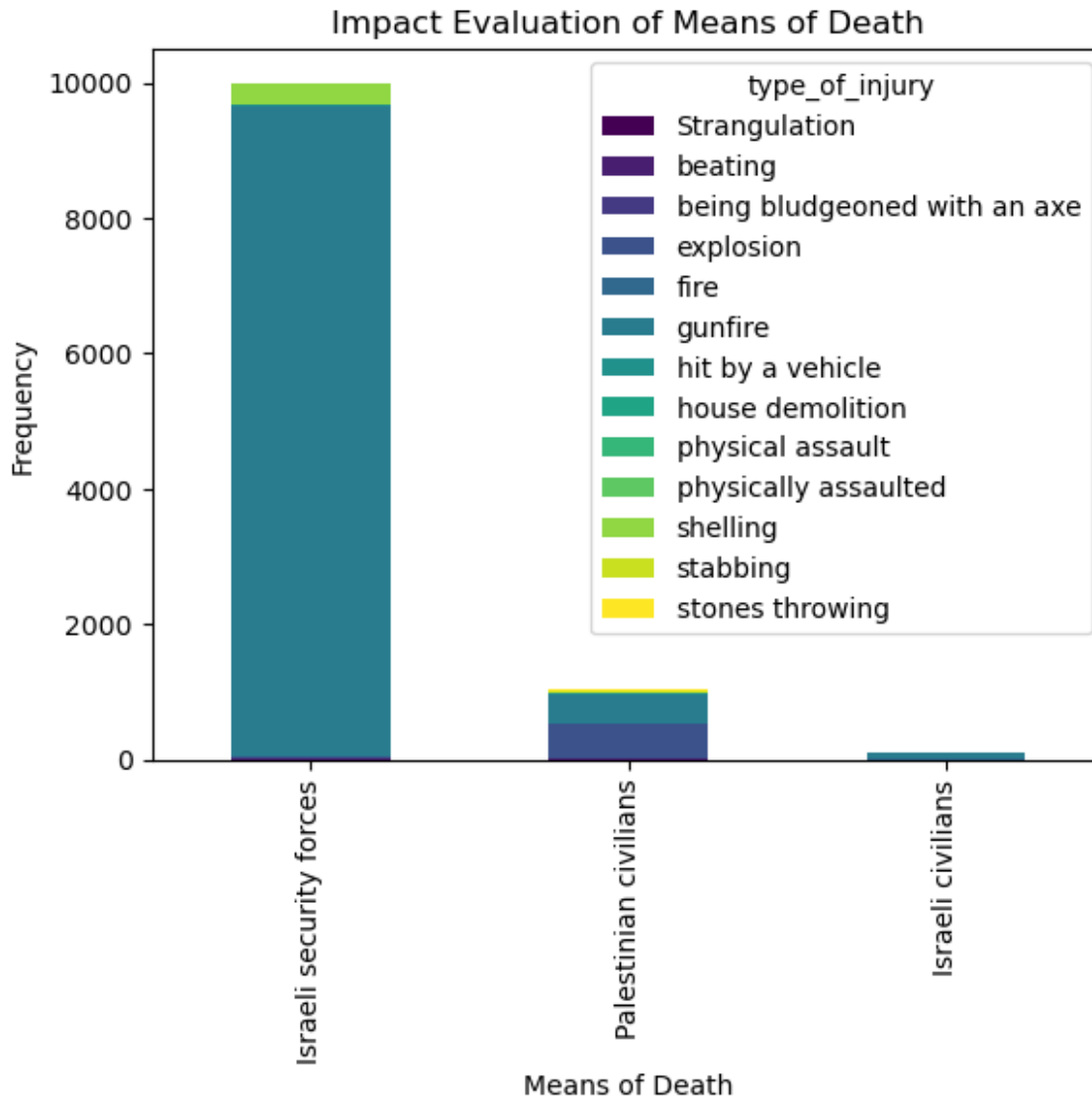
reason to use

horizontal bar chart **is** used to display the most common ammunition types, providing a clear comparison of their frequencies. The choice of a horizontal bar chart allows **for** easy readability of ammunition types on the y-axis **with** corresponding frequencies on the x-axis.

## Impact Evaluation of Means of Death

```
plt.figure(figsize=(12, 8))
impact_evaluation.drop('Total', axis=1).plot(kind='bar', stacked=True,
colormap='viridis')
plt.title('Impact Evaluation of Means of Death')
plt.xlabel('Means of Death')
plt.ylabel('Frequency')
plt.show()
```

<Figure size 1200x800 with 0 Axes>



reason to use

A stacked bar chart `is` used to illustrate the distribution of fatalities across different means of death, allowing a visual comparison of the contribution of each category to the total impact. The colormap `'viridis'` enhances readability by providing a perceptually uniform color scheme, aiding `in` better interpretation of the data

## Question 5

Age Distribution of Victims

```
import seaborn as sns
import matplotlib.pyplot as plt
```

```

conflict = conflict.dropna(subset=['ammunition'])

fatalities_by_ammunition =
conflict.groupby('ammunition').size().reset_index(name='fatalities_cou
nt')

max_fatalities_ammunition =
fatalities_by_ammunition.loc[fatalities_by_ammunition['fatalities_coun
t'].idxmax()]['ammunition']
print("\nMost fatalities caused by ammunition:",
max_fatalities_ammunition)

sns.set(style="whitegrid", rc={"axes.titlesize": "xx-large",
"axes.labelsize": "x-large"})

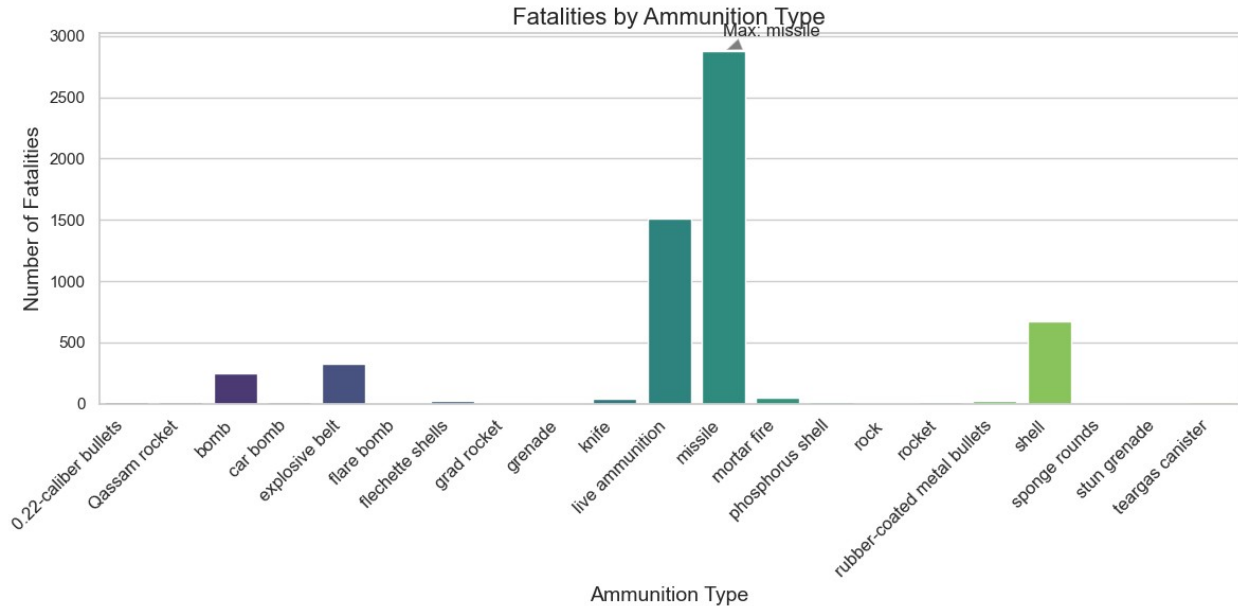
plt.figure(figsize=(12, 6))
bar_plot = sns.barplot(x='ammunition', y='fatalities_count',
data=fatalities_by_ammunition, palette='viridis')
bar_plot.set_title('Fatalities by Ammunition Type', fontsize=16)
bar_plot.set_xlabel('Ammunition Type', fontsize=14)
bar_plot.set_ylabel('Number of Fatalities', fontsize=14)
bar_plot.set_xticklabels(bar_plot.get_xticklabels(), rotation=45,
ha='right', fontsize=12)
bar_plot.yaxis.grid(True)

max_idx = fatalities_by_ammunition['fatalities_count'].idxmax()
bar_plot.annotate(f'Max: {max_fatalities_ammunition}',
xy=(max_idx,
fatalities_by_ammunition['fatalities_count'].max()),
xytext=(0, 10), textcoords='offset points',
arrowprops=dict(facecolor='black',
arrowstyle='wedge,tail_width=0.7', alpha=0.5))

plt.tight_layout()
plt.show()

```

Most fatalities caused by ammunition: missile



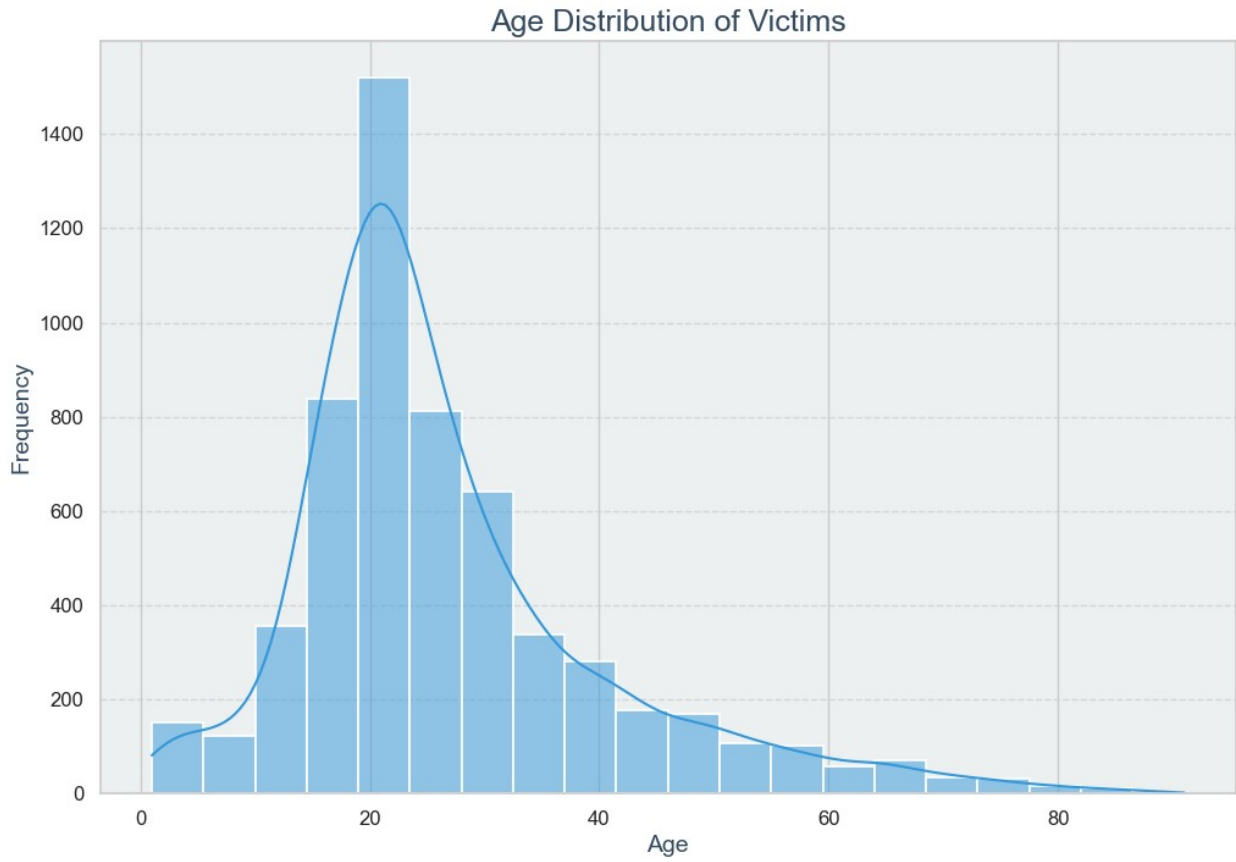
why used bar char in above question

A bar chart is used to visually represent the frequency of fatalities associated with different ammunition types, providing a clear comparison of fatality counts for each category. The code above employs a bar chart to display the distribution of fatalities across various ammunition types in the 'fatalities.csv' dataset.

## Question 6

Age distribution of victims

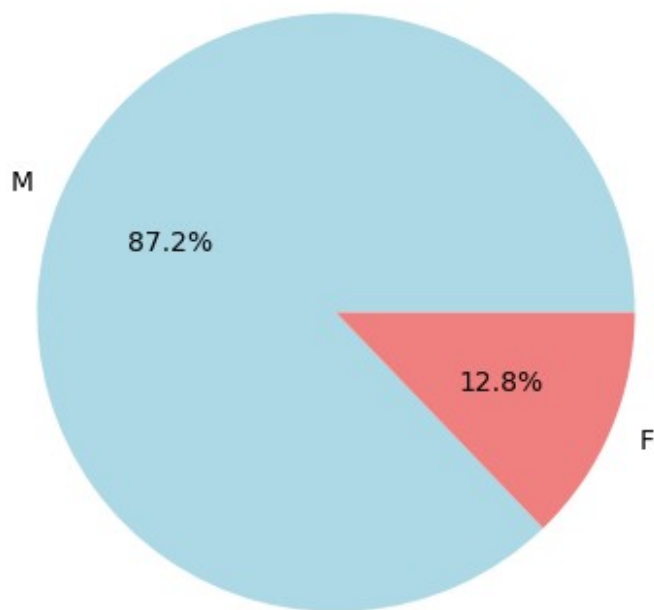
```
sns.set_theme(style="whitegrid")
fig, ax = plt.subplots(figsize=(12, 8))
sns.histplot(data=conflict, x='age', bins=20, kde=True,
color='#3498db', edgecolor='white', linewidth=1.2)
ax.set_title('Age Distribution of Victims', fontsize=18,
color='#34495e')
ax.set_xlabel('Age', fontsize=14, color='#34495e')
ax.set_ylabel('Frequency', fontsize=14, color='#34495e')
ax.grid(axis='y', linestyle='--', alpha=0.7)
ax.tick_params(axis='both', which='major', labelsize=12,
color='#34495e')
ax.set_facecolor('#ecf0f1')
plt.show()
```



#### Gender distribution of victims

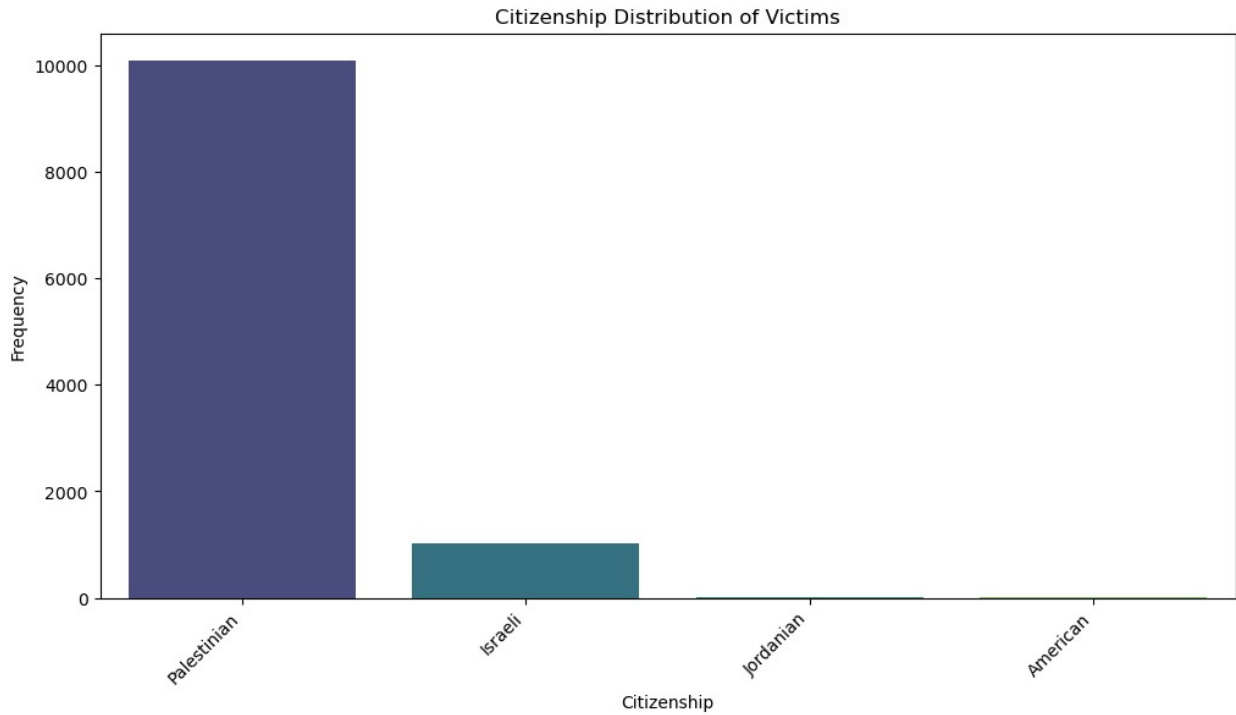
```
plt.figure(figsize=(8, 5))
conflict['gender'].value_counts().plot(kind='pie', autopct='%1.1f%%',
colors=['lightblue', 'lightcoral'])
plt.title('Gender Distribution of Victims')
plt.ylabel('')
plt.show()
```

Gender Distribution of Victims



Citizenship Distribution

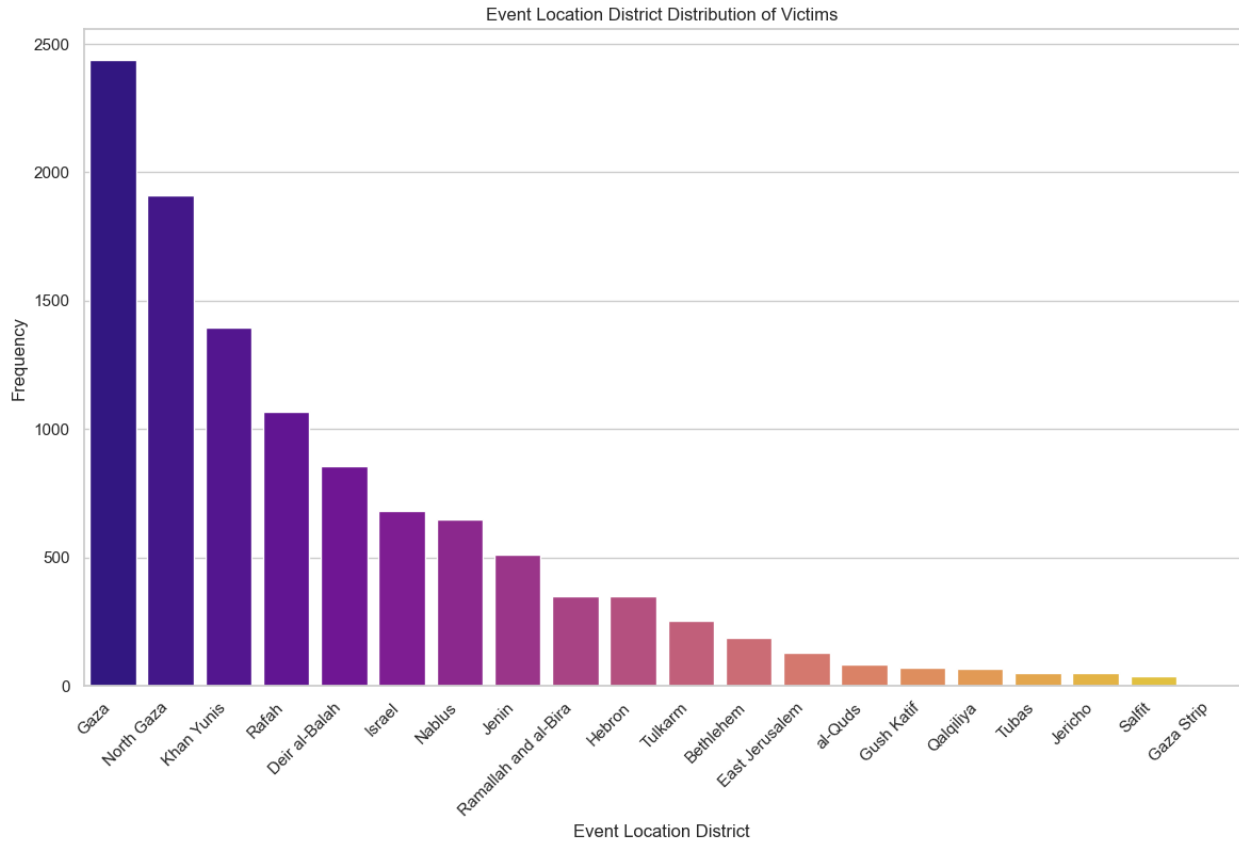
```
plt.figure(figsize=(12, 6))
sns.countplot(data=conflict, x='citizenship',
order=conflict['citizenship'].value_counts().index, palette='viridis')
plt.title('Citizenship Distribution of Victims')
plt.xlabel('Citizenship')
plt.ylabel('Frequency')
plt.xticks(rotation=45, ha='right')
plt.show()
```



### Place of Residence Distribution

```
plt.figure(figsize=(14, 8))
sns.countplot(data=conflict, x='event_location_district',
order=conflict['event_location_district'].value_counts().index,
palette='plasma')
plt.title('Event Location District Distribution of Victims')
plt.xlabel('Event Location District')
plt.ylabel('Frequency')
plt.xticks(rotation=45, ha='right')
plt.show()
```





reason to use

#### # for gender distribution

A pie chart effectively illustrates the proportional distribution of genders among victims, offering a clear comparison of the relative frequencies of male and female victims in the dataset.

#### # for citizenship graph

A bar chart is suitable for visualizing citizenship distribution because it provides a clear comparison of the frequency of victims for each citizenship category, helping to identify the most prevalent citizenships among the victims