


In [146...

```
# Import required libraries
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
import seaborn as sns
crimes = pd.read_csv("crimes.csv", parse_dates=["Date Rptd", "DATE OCC"], dtype={"T
crimes.head()
```

Out[146...

	DR_NO	Date Rptd	DATE OCC	TIME OCC	AREA NAME	Crm Cd Desc	Vict Age	Vict Sex	Vict Descent	Weapon Desc	Status Desc
0	220314085	2022-07-22	2020-05-12	1110	Southwest	THEFT OF IDENTITY	27	F	B	NaN	Inv C
1	222013040	2022-08-06	2020-06-04	1620	Olympic	THEFT OF IDENTITY	60	M	H	NaN	Inv C
2	220614831	2022-08-18	2020-08-17	1200	Hollywood	THEFT OF IDENTITY	28	M	H	NaN	Inv C
3	231207725	2023-02-27	2020-01-27	0635	77th Street	THEFT OF IDENTITY	37	M	H	NaN	Inv C
4	220213256	2022-07-14	2020-07-14	0900	Rampart	THEFT OF IDENTITY	79	M	B	NaN	Inv C



In [147...

```
crimes.dtypes
```

Out[147...

```
DR_NO          int64
Date Rptd      datetime64[ns]
DATE OCC       datetime64[ns]
TIME OCC       object
AREA NAME      object
Crm Cd Desc    object
Vict Age       int64
Vict Sex       object
Vict Descent    object
Weapon Desc    object
Status Desc    object
LOCATION        object
dtype: object
```

In [148...

```
crimes["hour_occ"] = crimes["TIME OCC"].str[:2]
```

In [149...

```
peak_crime_hour = int(crimes["hour_occ"].value_counts().index[0])
peak_crime_hour
```

Out[149...

```
12
```

```
In [150... crimes["TIME OCC"] = crimes["TIME OCC"].str[:2]+":"+crimes["TIME OCC"].str[2:]
```

```
In [151... crimes["TIME OCC"] = pd.to_datetime(crimes["TIME OCC"], format='%H:%M').dt.time
```

```
In [152... night_start = pd.to_datetime("22:00",format='%H:%M').time()  
night_end = pd.to_datetime("03:59", format='%H:%M').time()
```

```
In [153... crimes["is_night_crime"] = [True if (time >= night_start or time <= night_end ) else
```

```
In [154... display(crimes)
```

	DR_NO	Date Rptd	DATE OCC	TIME OCC	AREA NAME	Crm Cd Desc	Vict Age	Vict Sex	Vict Descent
0	220314085	2022-07-22	2020-05-12	11:10:00	Southwest	THEFT OF IDENTITY	27	F	B
1	222013040	2022-08-06	2020-06-04	16:20:00	Olympic	THEFT OF IDENTITY	60	M	H
2	220614831	2022-08-18	2020-08-17	12:00:00	Hollywood	THEFT OF IDENTITY	28	M	H
3	231207725	2023-02-27	2020-01-27	06:35:00	77th Street	THEFT OF IDENTITY	37	M	H
4	220213256	2022-07-14	2020-07-14	09:00:00	Rampart	THEFT OF IDENTITY	79	M	B
...	...	...	...	...	...	...	...	...	...
185710	231510379	2023-05-29	2023-05-25	11:00:00	N Hollywood	BUNCO, GRAND THEFT	25	M	W
185711	231604807	2023-01-27	2023-01-26	18:00:00	Foothill	VANDALISM - FELONY (\$400 & OVER, ALL CHURCH VA...	23	M	H
185712	231606525	2023-03-22	2023-03-22	10:00:00	Foothill	ASSAULT WITH DEADLY WEAPON, AGGRAVATED ASSAULT	25	F	H
185713	231210064	2023-04-12	2023-04-12	16:30:00	77th Street	ASSAULT WITH DEADLY WEAPON, AGGRAVATED ASSAULT	29	M	B
185714	230906458	2023-03-05	2023-03-05	09:00:00	Van Nuys	VANDALISM - MISDEAMEANOR (\$399 OR UNDER)	53	F	H

185715 rows × 14 columns



```
In [155... peak_night_crime_location = crimes.groupby("AREA NAME")["is_night_crime"].count().s
peak_night_crime_location
```

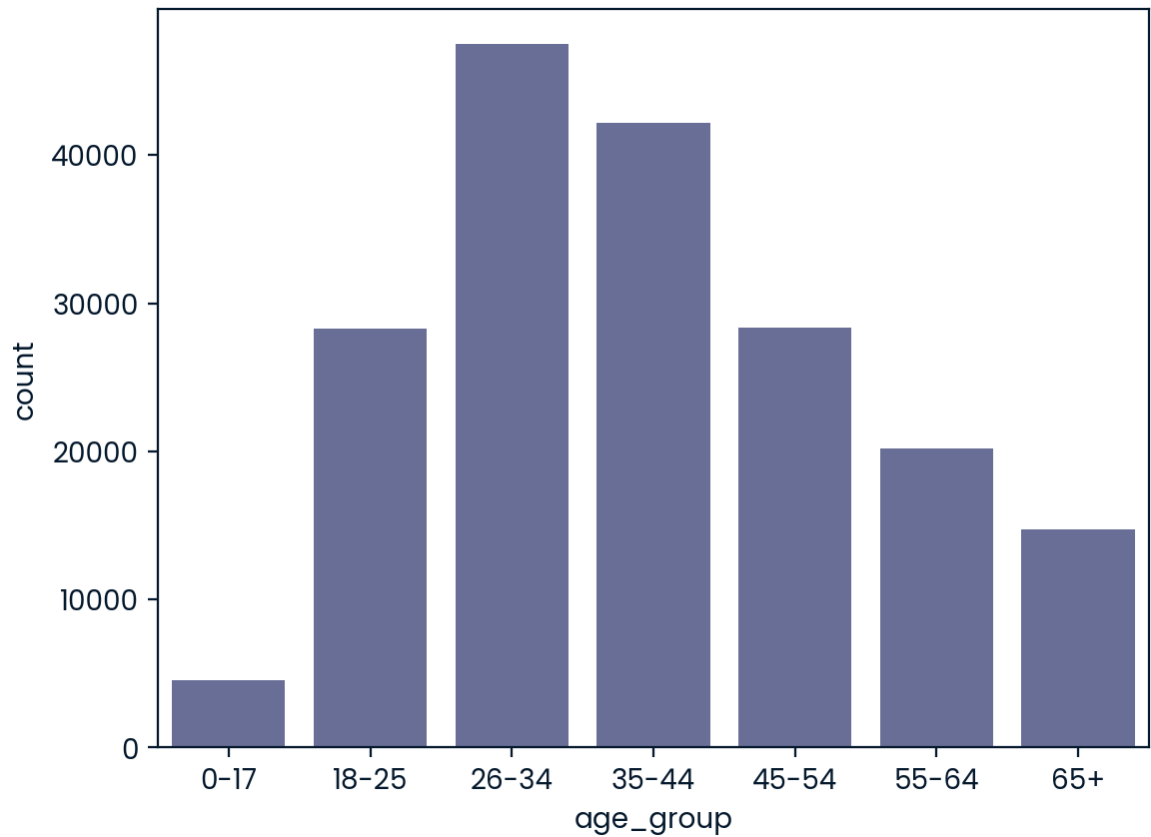
Out[155... 'Central'

```
In [156... labels = ["0-17", "18-25", "26-34", "35-44", "45-54", "55-64", "65+"]
```

```
bins = [0,17,25,34,44,54,64,crimes["Vict Age"].max()]
```

```
In [157...] crimes["age_group"] = pd.cut(crimes["Vict Age"], labels=labels, bins=bins)
```

```
In [158...] sns.countplot(data=crimes, x="age_group")  
plt.show()
```



```
In [159...] victim_ages = crimes["age_group"].value_counts()  
victim_ages
```

```
Out[159...] 26-34    47470  
            35-44    42157  
            45-54    28353  
            18-25    28291  
            55-64    20169  
            65+     14747  
            0-17     4528  
            Name: age_group, dtype: int64
```