

## Plotting the Hourly Arrest Rate

### Task Description

1. Import matplotlib.pyplot using the alias 'plt'.
2. Create a line plot of the 'hourly\_arrest\_rate' using the plot() method.
3. Label the x-axis as 'Hour', label the y-axis as 'Arrest Rate', and add the title 'Arrest Rate by Time of Day'.
4. Display the plot using the show() function.

### Code Solution

```
# Import matplotlib.pyplot as plt
import matplotlib.pyplot as plt

# Create a line plot of 'hourly_arrest_rate'
hourly_arrest_rate.plot()

# Add the xlabel, ylabel, and title
plt.xlabel('Hour')
plt.ylabel('Arrest Rate')
plt.title('Arrest Rate by Time of Day')

# Display the plot
plt.show()
```

### Code Explanation

1. The line 'import matplotlib.pyplot as plt' imports the matplotlib library, which is used for creating visualizations.
2. The line 'hourly\_arrest\_rate.plot()' creates a line plot of the 'hourly\_arrest\_rate' Series.
3. The lines 'plt.xlabel('Hour')', 'plt.ylabel('Arrest Rate')', and 'plt.title('Arrest Rate by Time of Day')' label the x-axis, y-axis, and add a title to the plot, respectively.
4. The line 'plt.show()' displays the plot.