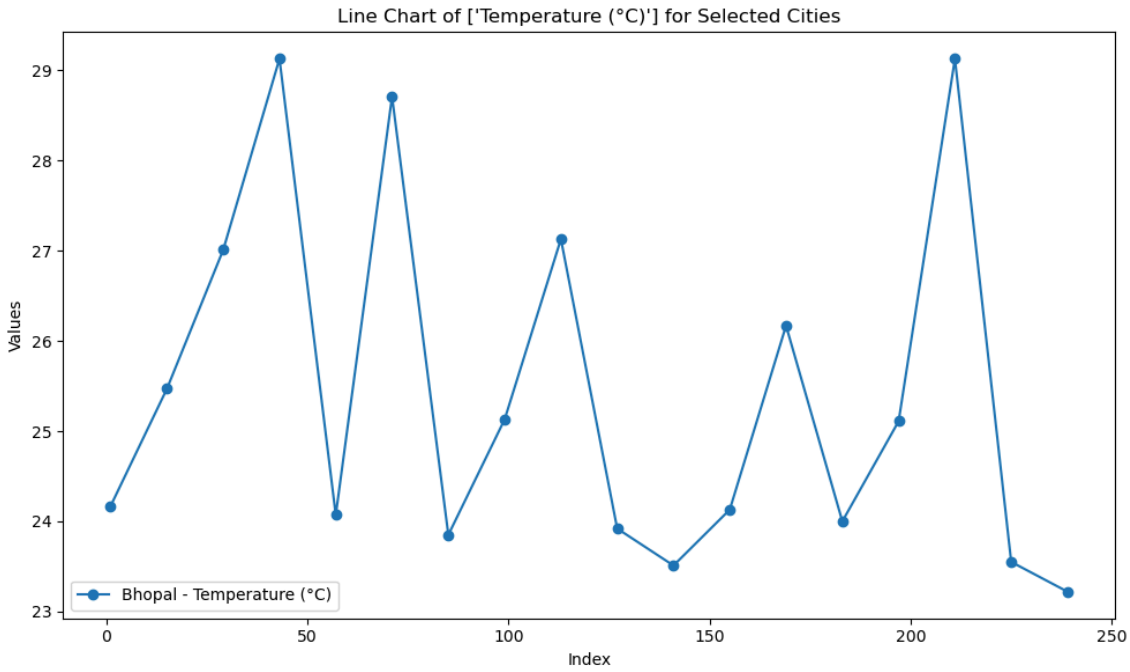
In [3]:
```
import numpy as np
import pandas as pd
import matplotlib.pyplot as plt




#Load the CSV file
data = pd.read_csv("C:/Users/ajayb/Downloads/Weather_Data_CSV_File.csv")

# Function to plot charts for multiple cities and columns
def plot_chart(cities, columns, chart_type):
    # Filter the data for the selected cities
    filtered_data = data[data['Name'].isin(cities)]

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

    # Line chart
    if chart_type == 'line':
        for column in columns:
            for city in cities:
                city_data = filtered_data[filtered_data['Name'] == city]
                plt.plot(city_data.index, city_data[column], label=f'{city}
        plt.title(f'Line Chart of {columns} for Selected Cities')
        plt.xlabel('Index')
        plt.ylabel('Values')

    # Bar chart
    elif chart_type == 'bar':
        for column in columns:
            for city in cities:
                city_data = filtered_data[filtered_data['Name'] == city]
                plt.bar(city_data.index, city_data[column], label=f'{city}
        plt.title(f'Bar Chart of {columns} for Selected Cities')
        plt.xlabel('Index')
        plt.ylabel('Values')
        plt.grid()

    # Pie chart (can only visualize a single column per city)
    elif chart_type == 'pie':
        for column in columns:
            for city in cities:
                city_data = filtered_data[filtered_data['Name'] == city]
                plt.figure(figsize=(7,7))
                plt.pie(city_data[column], labels=city_data.index, autopct=
                plt.title(f'Pie Chart of {column} for {city}')
                plt.show()
        return

    plt.legend()
    plt.tight_layout()
    plt.show()

# Ask user for input
cities = input("Enter the cities you want to visualize (comma-separated): "
columns = input("Enter the columns you want to visualize (comma-separated):
chart_type = input("Enter the chart type (pie, line, bar): ")

# Clean up city and column names (remove extra spaces)
cities = [city.strip() for city in cities]
columns = [column.strip() for column in columns]
```

```
# Plot the chart
plot_chart(cities, columns, chart_type)
```

```
Enter the cities you want to visualize (comma-separated): Bhopal
Enter the columns you want to visualize (comma-separated): Temperature (°
C)
Enter the chart type (pie, line, bar): line
```



In [4]:
```
data = pd.read_csv("C:/Users/ajayb/Downloads/Weather_Data_CSV_File.csv")
data
```

Out[4]:

	Name	Longitude	Latitude	Temperature (°C)	Feels Like (°C)	Humidity (%)	Wind Speed (m/s)	Wind Gust (m/s)	Clouds (%)	De
0	Indore	75.8333	22.7179	25.10	26.12	94	3.60	NaN	40	
1	Bhopal	77.4000	23.2667	24.17	25.02	91	4.45	7.73	100	
2	Jabalpur	79.9501	23.1670	27.47	31.97	89	3.09	NaN	75	
3	Balaghat	80.1833	21.8000	27.11	30.29	83	0.36	0.55	100	
4	Dewas	76.0667	22.9667	25.10	26.12	94	4.70	8.04	100	
...	...	...	...	...	...	...	...	...	...	
1607	Vaijapur	74.7333	19.9167	30.10	32.24	56	6.78	6.63	90	
1608	Sennar	33.5672	13.5691	29.95	32.16	57	3.74	4.12	87	
1609	Chakan	73.8500	18.7500	28.79	31.13	63	6.58	7.11	67	
1610	Shirur	74.3725	18.8266	28.98	30.85	59	6.63	7.07	96	
1611	Ajanta	75.7514	20.5325	26.04	26.04	83	3.93	6.45	100	

1612 rows × 12 columns

In [ ]:
```
```