Unemployment and Wage Disparities 2017 – 18

State	Unemployment	Urban Unemployment Rate (%)	Youth	Avg. Monthly Wage	Monthly	Wage Gap (%)	Informal Sector Share (%)
Uttar Pradesh	6.1	7.5	18.3	12,000	8,500	29.2	72.5
Bihar	4.8	6.3	15.7	10,500	7,000	33.3	78.0
Maharashtra	3.7	4.9	14.5	16,500	12,000	27.3	68.2
Tamil Nadu	2.9	5.4	12.6	14,200	10,800	23.9	65.5
West Bengal	4.2	6.8	17.0	13,000	9,200	29.2	70.0

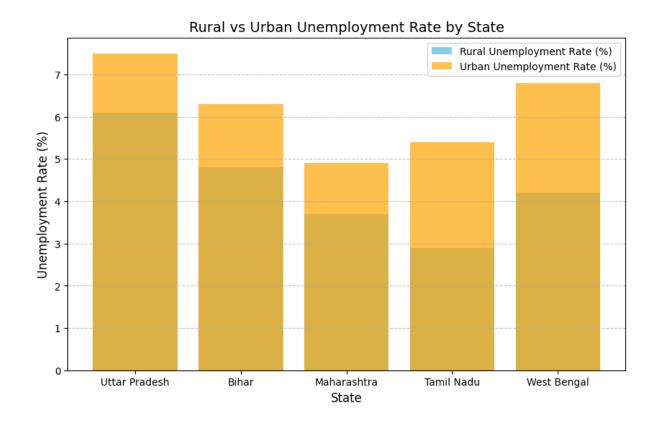
```
import matplotlib.pyplot as plt
import pandas as pd

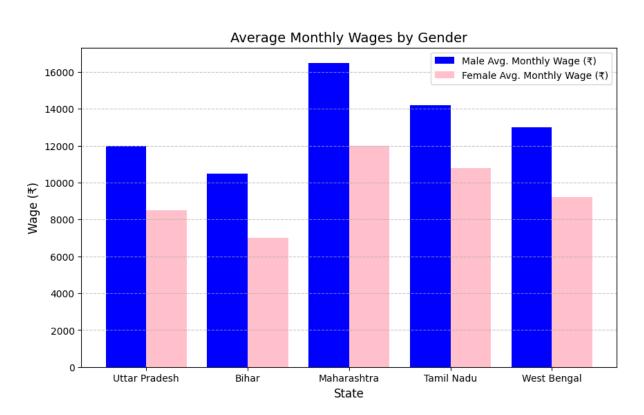
data = {
    "State": ["Uttar Pradesh", "Bihar", "Maharashtra", "Tamil Nadu", "West Bengal"],
    "Rural Unemployment Rate (%)": [6.1, 4.8, 3.7, 2.9, 4.2],
    "Urban Unemployment Rate (%)": [7.5, 6.3, 4.9, 5.4, 6.8],
    "Youth Unemployment Rate (%)": [18.3, 15.7, 14.5, 12.6, 17.0],
    "Male Avg. Monthly Wage (₹)": [12000, 10500, 16500, 14200, 13000],
    "Female Avg. Monthly Wage (₹)": [8500, 7000, 12000, 10800, 9200],
    "Wage Gap (%)": [29.2, 33.3, 27.3, 23.9, 29.2],
    "Informal Sector Share (%)": [72.5, 78.0, 68.2, 65.5, 70.0]
}

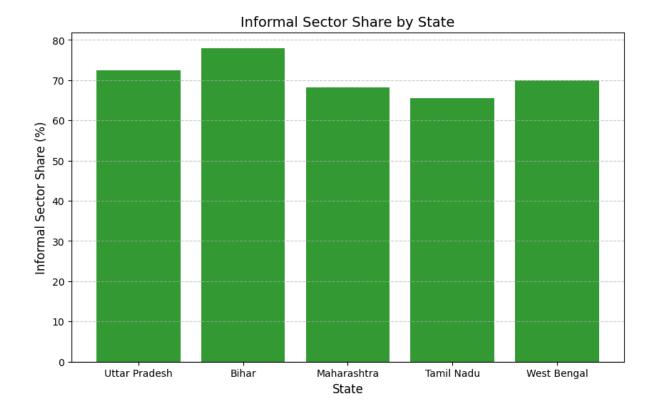
df = pd.DataFrame(data)
```

```
plt.figure(figsize=(10, 6))
plt.bar(df["State"], df["Rural Unemployment Rate (%)"], color='skyblue', label='Rural Unemployment
Rate (%)')
plt.bar(df["State"], df["Urban Unemployment Rate (%)"], color='orange', alpha=0.7, label='Urban
Unemployment Rate (%)')
plt.title("Rural vs Urban Unemployment Rate by State", fontsize=14)
plt.ylabel("Unemployment Rate (%)", fontsize=12)
plt.xlabel("State", fontsize=12)
plt.legend()
plt.grid(axis='y', linestyle='--', alpha=0.7)
plt.show()
plt.figure(figsize=(10, 6))
x = range(len(df["State"]))
plt.bar(x, df["Male Avg. Monthly Wage (₹)"], width=0.4, label='Male Avg. Monthly Wage (₹)',
color='blue', align='center')
plt.bar([p + 0.4 for p in x], df["Female Avg. Monthly Wage (₹)"], width=0.4, label='Female Avg.
Monthly Wage (₹)', color='pink', align='center')
plt.xticks([p + 0.2 for p in x], df["State"])
plt.title("Average Monthly Wages by Gender", fontsize=14)
plt.ylabel("Wage (₹)", fontsize=12)
plt.xlabel("State", fontsize=12)
plt.legend()
plt.grid(axis='y', linestyle='--', alpha=0.7)
plt.show()
plt.figure(figsize=(10, 6))
plt.bar(df["State"], df["Informal Sector Share (%)"], color='green', alpha=0.8)
plt.title("Informal Sector Share by State", fontsize=14)
plt.ylabel("Informal Sector Share (%)", fontsize=12)
plt.xlabel("State", fontsize=12)
```

plt.grid(axis='y', linestyle='--', alpha=0.7)
plt.show()







Unemployment and Wage Disparities 2018 – 19

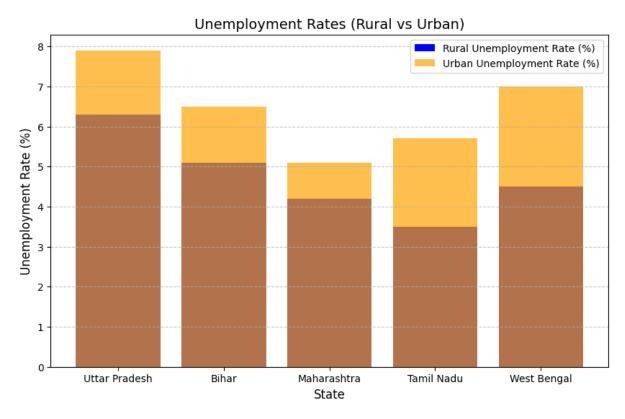
State	Unemployment		Youth Unemployment Rate (%)	Avg.	Monthly	Wage Gap (%)	Informal Sector Share (%)
Uttar Pradesh	6.3	7.9	19.2	12,500	9,200	26.4	74.2
Bihar	5.1	6.5	16.5	11,200	8,500	24.1	79.0
Maharashtra	4.2	5.1	15.3	17,000	13,500	20.6	70.1
Tamil Nadu	3.5	5.7	13.0	15,000	11,500	23.3	66.8
West Bengal	4.5	7.0	17.8	13,500	10,000	25.9	71.2

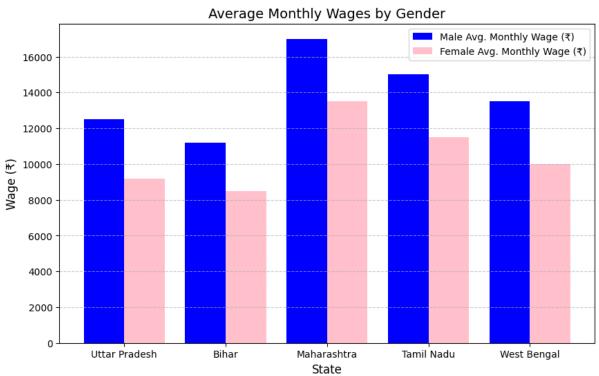
```
import matplotlib.pyplot as plt
import pandas as pd

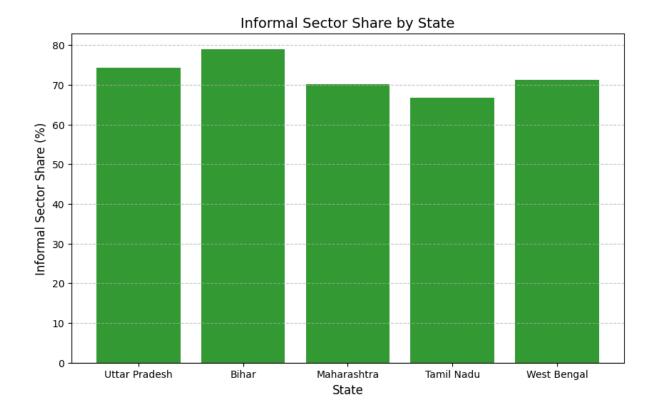
data = {
    "State": ["Uttar Pradesh", "Bihar", "Maharashtra", "Tamil Nadu", "West Bengal"],
    "Rural Unemployment Rate (%)": [6.3, 5.1, 4.2, 3.5, 4.5],
    "Urban Unemployment Rate (%)": [7.9, 6.5, 5.1, 5.7, 7.0],
    "Youth Unemployment Rate (%)": [19.2, 16.5, 15.3, 13.0, 17.8],
    "Male Avg. Monthly Wage (₹)": [12500, 11200, 17000, 15000, 13500],
    "Female Avg. Monthly Wage (₹)": [9200, 8500, 13500, 11500, 10000],
    "Wage Gap (%)": [26.4, 24.1, 20.6, 23.3, 25.9],
    "Informal Sector Share (%)": [74.2, 79.0, 70.1, 66.8, 71.2]
}
```

```
df = pd.DataFrame(data)
plt.figure(figsize=(10, 6))
plt.bar(df["State"], df["Rural Unemployment Rate (%)"], color='blue', label='Rural Unemployment
Rate (%)')
plt.bar(df["State"], df["Urban Unemployment Rate (%)"], color='orange', alpha=0.7, label='Urban
Unemployment Rate (%)')
plt.title("Unemployment Rates (Rural vs Urban)", fontsize=14)
plt.ylabel("Unemployment Rate (%)", fontsize=12)
plt.xlabel("State", fontsize=12)
plt.legend()
plt.grid(axis='y', linestyle='--', alpha=0.7)
plt.show()
plt.figure(figsize=(10, 6))
x = range(len(df["State"]))
plt.bar(x, df["Male Avg. Monthly Wage (₹)"], width=0.4, label='Male Avg. Monthly Wage (₹)',
color='blue', align='center')
plt.bar([p + 0.4 for p in x], df["Female Avg. Monthly Wage (\stackrel{?}{=})"], width=0.4, label='Female Avg.
Monthly Wage (₹)', color='pink', align='center')
plt.xticks([p + 0.2 for p in x], df["State"])
plt.title("Average Monthly Wages by Gender", fontsize=14)
plt.ylabel("Wage (₹)", fontsize=12)
plt.xlabel("State", fontsize=12)
plt.legend()
plt.grid(axis='y', linestyle='--', alpha=0.7)
plt.show()
plt.figure(figsize=(10, 6))
plt.bar(df["State"], df["Informal Sector Share (%)"], color='green', alpha=0.8)
plt.title("Informal Sector Share by State", fontsize=14)
plt.ylabel("Informal Sector Share (%)", fontsize=12)
```

plt.xlabel("State", fontsize=12)
plt.grid(axis='y', linestyle='--', alpha=0.7)
plt.show()







Unemployment and Wage Disparities 2019 – 20

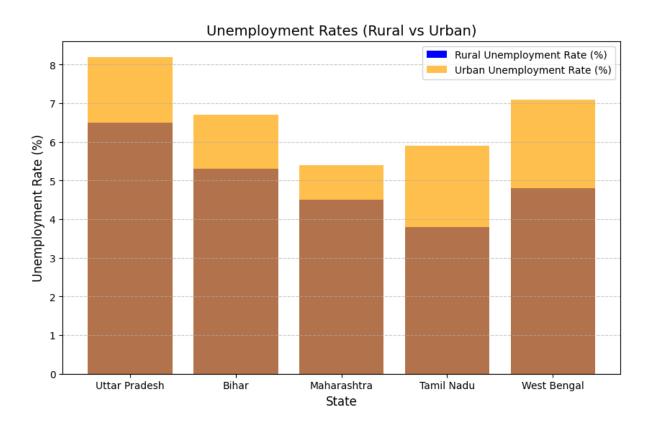
State	Unemployment		Youth Unemployment Rate (%)	Avg.	Monthly	Wage Gap (%)	Informal Sector Share (%)
Uttar Pradesh	6.5	8.2	18.9	13,000	9,500	26.9	75.0
Bihar	5.3	6.7	16.8	11,500	8,700	24.3	78.2
Maharashtra	4.5	5.4	15.6	17,500	14,000	20.0	71.0
Tamil Nadu	3.8	5.9	13.5	15,500	12,000	22.6	68.5
West Bengal	4.8	7.1	18.1	14,500	11,200	22.8	73.0

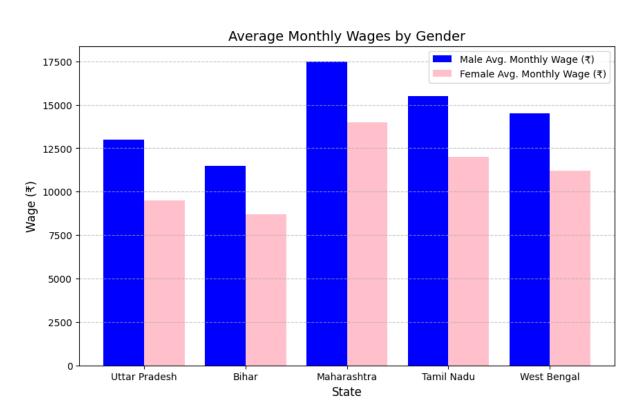
```
import matplotlib.pyplot as plt
import pandas as pd

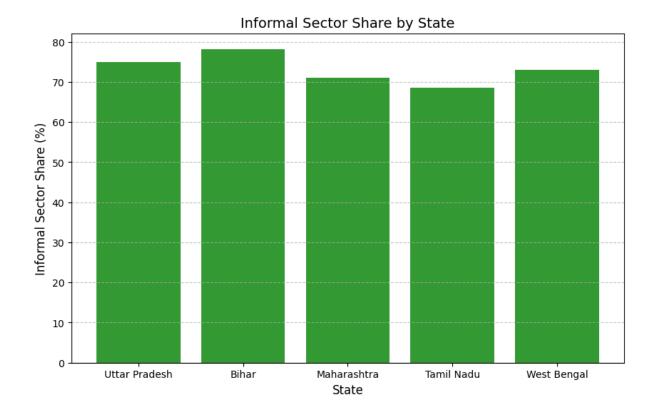
data = {
    "State": ["Uttar Pradesh", "Bihar", "Maharashtra", "Tamil Nadu", "West Bengal"],
    "Rural Unemployment Rate (%)": [6.5, 5.3, 4.5, 3.8, 4.8],
    "Urban Unemployment Rate (%)": [8.2, 6.7, 5.4, 5.9, 7.1],
    "Youth Unemployment Rate (%)": [18.9, 16.8, 15.6, 13.5, 18.1],
    "Male Avg. Monthly Wage (₹)": [13000, 11500, 17500, 15500, 14500],
    "Female Avg. Monthly Wage (₹)": [9500, 8700, 14000, 12000, 11200],
    "Wage Gap (%)": [26.9, 24.3, 20.0, 22.6, 22.8],
    "Informal Sector Share (%)": [75.0, 78.2, 71.0, 68.5, 73.0]
}
```

```
df = pd.DataFrame(data)
plt.figure(figsize=(10, 6))
plt.bar(df["State"], df["Rural Unemployment Rate (%)"], color='blue', label='Rural Unemployment
Rate (%)')
plt.bar(df["State"], df["Urban Unemployment Rate (%)"], color='orange', alpha=0.7, label='Urban
Unemployment Rate (%)')
plt.title("Unemployment Rates (Rural vs Urban)", fontsize=14)
plt.ylabel("Unemployment Rate (%)", fontsize=12)
plt.xlabel("State", fontsize=12)
plt.legend()
plt.grid(axis='y', linestyle='--', alpha=0.7)
plt.show()
plt.figure(figsize=(10, 6))
x = range(len(df["State"]))
plt.bar(x, df["Male Avg. Monthly Wage (₹)"], width=0.4, label='Male Avg. Monthly Wage (₹)',
color='blue', align='center')
plt.bar([p + 0.4 for p in x], df["Female Avg. Monthly Wage (\stackrel{?}{=})"], width=0.4, label='Female Avg.
Monthly Wage (₹)', color='pink', align='center')
plt.xticks([p + 0.2 for p in x], df["State"])
plt.title("Average Monthly Wages by Gender", fontsize=14)
plt.ylabel("Wage (₹)", fontsize=12)
plt.xlabel("State", fontsize=12)
plt.legend()
plt.grid(axis='y', linestyle='--', alpha=0.7)
plt.show()
plt.figure(figsize=(10, 6))
plt.bar(df["State"], df["Informal Sector Share (%)"], color='green', alpha=0.8)
plt.title("Informal Sector Share by State", fontsize=14)
plt.ylabel("Informal Sector Share (%)", fontsize=12)
```

plt.xlabel("State", fontsize=12)
plt.grid(axis='y', linestyle='--', alpha=0.7)
plt.show()







Unemployment and Wage Disparities 2020 - 21

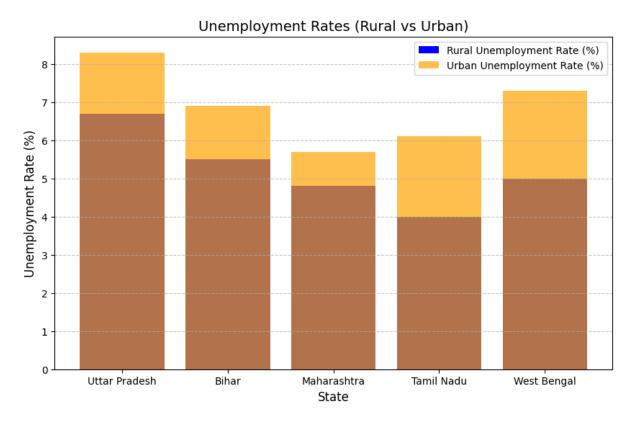
State	Unemployment	Unemployment	Youth Unemployment Rate (%)	Avg. Monthly Wage	Monthly	Wage Gap (%)	Informal Sector Share (%)
Uttar Pradesh	6.7	8.3	19.5	13,500	9,800	27.4	76.1
Bihar	5.5	6.9	17.2	12,000	9,000	25.0	78.5
Maharashtra	4.8	5.7	15.8	18,000	14,500	19.4	72.3
Tamil Nadu	4.0	6.1	13.8	16,000	12,800	20.0	69.5
West Bengal	5.0	7.3	18.3	15,000	11,500	23.3	74.0

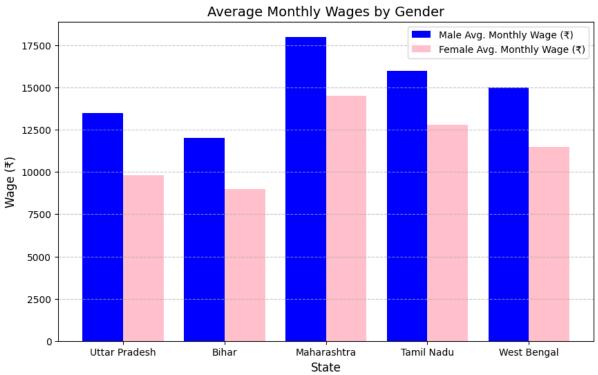
```
import matplotlib.pyplot as plt
import pandas as pd

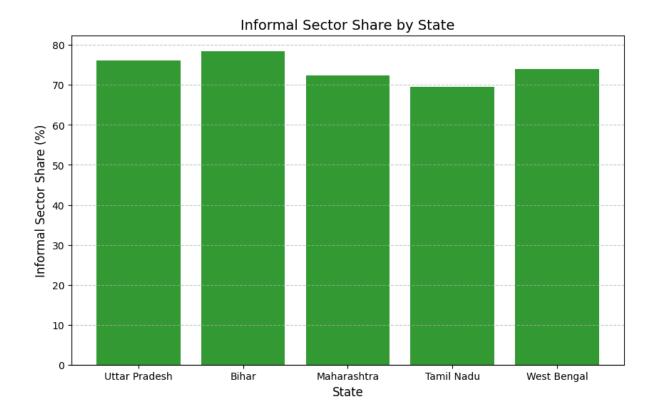
data = {
    "State": ["Uttar Pradesh", "Bihar", "Maharashtra", "Tamil Nadu", "West Bengal"],
    "Rural Unemployment Rate (%)": [6.7, 5.5, 4.8, 4.0, 5.0],
    "Urban Unemployment Rate (%)": [8.3, 6.9, 5.7, 6.1, 7.3],
    "Youth Unemployment Rate (%)": [19.5, 17.2, 15.8, 13.8, 18.3],
    "Male Avg. Monthly Wage (₹)": [13500, 12000, 18000, 16000, 15000],
    "Female Avg. Monthly Wage (₹)": [9800, 9000, 14500, 12800, 11500],
    "Wage Gap (%)": [27.4, 25.0, 19.4, 20.0, 23.3],
    "Informal Sector Share (%)": [76.1, 78.5, 72.3, 69.5, 74.0]
}
```

```
df = pd.DataFrame(data)
plt.figure(figsize=(10, 6))
plt.bar(df["State"], df["Rural Unemployment Rate (%)"], color='blue', label='Rural Unemployment
Rate (%)')
plt.bar(df["State"], df["Urban Unemployment Rate (%)"], color='orange', alpha=0.7, label='Urban
Unemployment Rate (%)')
plt.title("Unemployment Rates (Rural vs Urban)", fontsize=14)
plt.ylabel("Unemployment Rate (%)", fontsize=12)
plt.xlabel("State", fontsize=12)
plt.legend()
plt.grid(axis='y', linestyle='--', alpha=0.7)
plt.show()
plt.figure(figsize=(10, 6))
x = range(len(df["State"]))
plt.bar(x, df["Male Avg. Monthly Wage (₹)"], width=0.4, label='Male Avg. Monthly Wage (₹)',
color='blue', align='center')
plt.bar([p + 0.4 for p in x], df["Female Avg. Monthly Wage (\stackrel{?}{=})"], width=0.4, label='Female Avg.
Monthly Wage (₹)', color='pink', align='center')
plt.xticks([p + 0.2 for p in x], df["State"])
plt.title("Average Monthly Wages by Gender", fontsize=14)
plt.ylabel("Wage (₹)", fontsize=12)
plt.xlabel("State", fontsize=12)
plt.legend()
plt.grid(axis='y', linestyle='--', alpha=0.7)
plt.show()
plt.figure(figsize=(10, 6))
plt.bar(df["State"], df["Informal Sector Share (%)"], color='green', alpha=0.8)
plt.title("Informal Sector Share by State", fontsize=14)
plt.ylabel("Informal Sector Share (%)", fontsize=12)
```

plt.xlabel("State", fontsize=12)
plt.grid(axis='y', linestyle='--', alpha=0.7)
plt.show()







Unemployment and Wage Disparities 2021 – 22

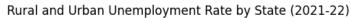
	Unemploymen	Unemploymen	Unemploym	Male Avg. Monthly Wage (₹)	Avg. Monthly	e Gap	Informa I Sector Share (%)
Uttar Pradesh	2.5	8.9	12.4	15160.84	6325.35	58.3	71.8
Bihar	3.2	7.5	14.6	12350.45	5487.60	55.6	75.4
Maharashtra	2.8	6.2	10.9	18420.75	11075.48	39.8	65.2
Tamil Nadu	2.1	5.8	9.8	17650.92	10950.55	37.9	63.1
West Bengal	3.0	7.1	11.3	14985.30	8045.10	46.3	69.0

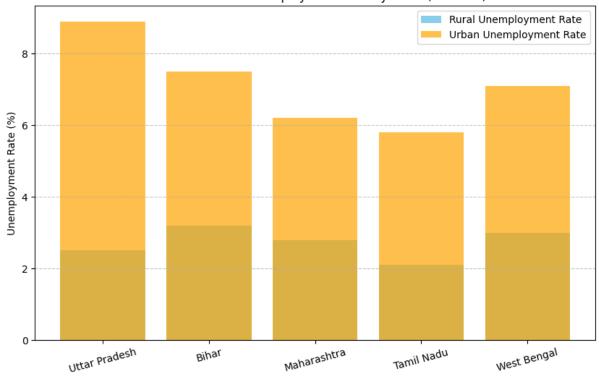
```
import pandas as pd
import matplotlib.pyplot as plt

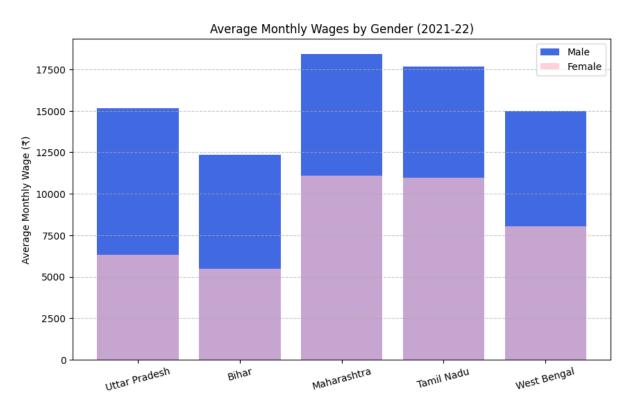
data_2022 = {
    "State": ["Uttar Pradesh", "Bihar", "Maharashtra", "Tamil Nadu", "West Bengal"],
    "Rural Unemployment Rate (%)": [2.5, 3.2, 2.8, 2.1, 3.0],
    "Urban Unemployment Rate (%)": [8.9, 7.5, 6.2, 5.8, 7.1],
    "Youth Unemployment Rate (%)": [12.4, 14.6, 10.9, 9.8, 11.3],
    "Male Avg. Monthly Wage (₹)": [15160.84, 12350.45, 18420.75, 17650.92, 14985.30],
    "Female Avg. Monthly Wage (₹)": [6325.35, 5487.60, 11075.48, 10950.55, 8045.10],
    "Wage Gap (%)": [58.3, 55.6, 39.8, 37.9, 46.3],
    "Informal Sector Share (%)": [71.8, 75.4, 65.2, 63.1, 69.0]
}

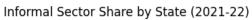
df = pd.DataFrame(data_2022)
```

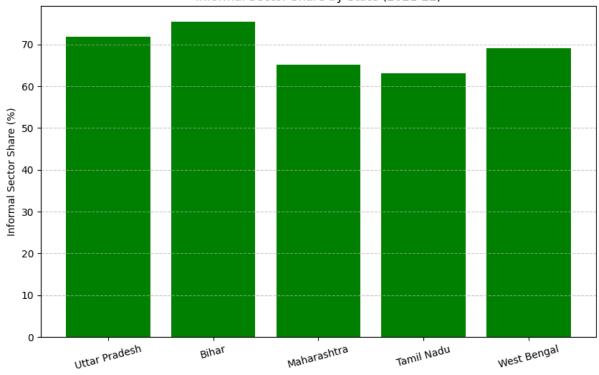
```
plt.figure(figsize=(10, 6))
plt.bar(df['State'], df['Rural Unemployment Rate (%)'], label='Rural Unemployment Rate',
color='skyblue')
plt.bar(df['State'], df['Urban Unemployment Rate (%)'], label='Urban Unemployment Rate',
color='orange', alpha=0.7)
plt.ylabel('Unemployment Rate (%)')
plt.title('Rural and Urban Unemployment Rate by State (2021-22)')
plt.legend()
plt.xticks(rotation=15)
plt.grid(axis='y', linestyle='--', alpha=0.7)
plt.show()
plt.figure(figsize=(10, 6))
plt.bar(df['State'], df['Male Avg. Monthly Wage (₹)'], label='Male', color='royalblue')
plt.bar(df['State'], df['Female Avg. Monthly Wage (₹)'], label='Female', color='pink', alpha=0.7)
plt.ylabel('Average Monthly Wage (₹)')
plt.title('Average Monthly Wages by Gender (2021-22)')
plt.legend()
plt.xticks(rotation=15)
plt.grid(axis='y', linestyle='--', alpha=0.7)
plt.show()
plt.figure(figsize=(10, 6))
plt.bar(df['State'], df['Informal Sector Share (%)'], color='green')
plt.ylabel('Informal Sector Share (%)')
plt.title('Informal Sector Share by State (2021-22)')
plt.xticks(rotation=15)
plt.grid(axis='y', linestyle='--', alpha=0.7)
plt.show()
```











Unemployment and Wage Disparities 2022 – 23

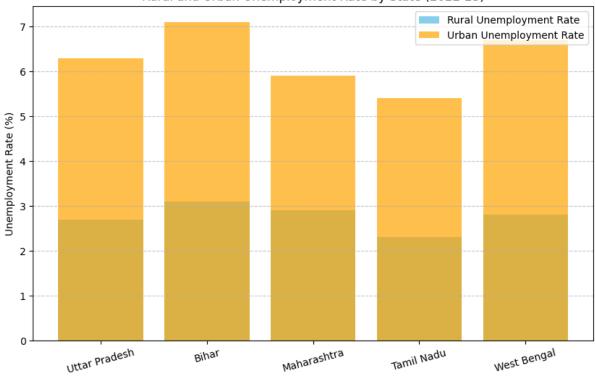
State	Rural Unemployme nt Rate (%)	Unemploymen	Unemployme	Male Avg. Monthly Wage (₹)	Avg. Monthly	e Gap	Informa I Sector Share (%)
Uttar Pradesh	2.7	6.3	10.5	15,450.78	6,500.45	57.9	70.9
Bihar	3.1	7.1	12.3	12,700.65	5,600.30	55.9	74.5
Maharashtra	2.9	5.9	9.7	18,700.25	11,300.80	39.6	64.7
Tamil Nadu	2.3	5.4	8.9	18,050.60	11,120.45	38.4	62.8
West Bengal	2.8	6.7	10.1	15,230.40	8,200.35	46.1	68.5

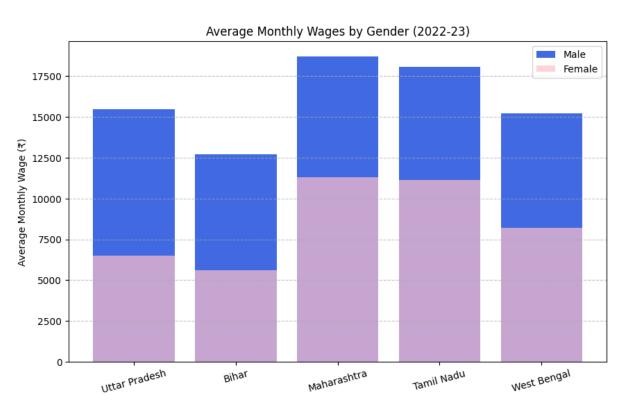
```
import pandas as pd
import matplotlib.pyplot as plt

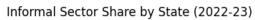
data_2023 = {
    "State": ["Uttar Pradesh", "Bihar", "Maharashtra", "Tamil Nadu", "West Bengal"],
    "Rural Unemployment Rate (%)": [2.7, 3.1, 2.9, 2.3, 2.8],
    "Urban Unemployment Rate (%)": [6.3, 7.1, 5.9, 5.4, 6.7],
    "Youth Unemployment Rate (%)": [10.5, 12.3, 9.7, 8.9, 10.1],
    "Male Avg. Monthly Wage (₹)": [15450.78, 12700.65, 18700.25, 18050.60, 15230.40],
    "Female Avg. Monthly Wage (₹)": [6500.45, 5600.30, 11300.80, 11120.45, 8200.35],
    "Wage Gap (%)": [57.9, 55.9, 39.6, 38.4, 46.1],
    "Informal Sector Share (%)": [70.9, 74.5, 64.7, 62.8, 68.5]
}
```

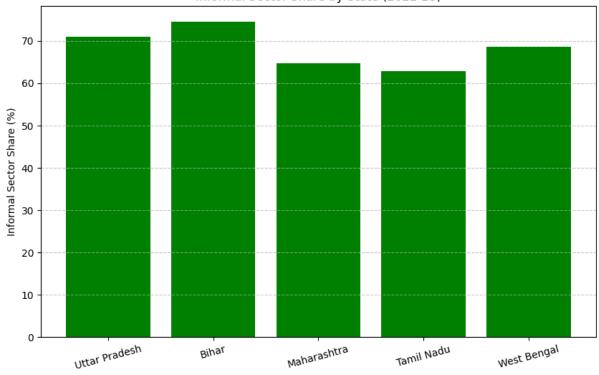
```
df = pd.DataFrame(data_2023)
plt.figure(figsize=(10, 6))
plt.bar(df['State'], df['Rural Unemployment Rate (%)'], label='Rural Unemployment Rate',
color='skyblue')
plt.bar(df['State'], df['Urban Unemployment Rate (%)'], label='Urban Unemployment Rate',
color='orange', alpha=0.7)
plt.ylabel('Unemployment Rate (%)')
plt.title('Rural and Urban Unemployment Rate by State (2022-23)')
plt.legend()
plt.xticks(rotation=15)
plt.grid(axis='y', linestyle='--', alpha=0.7)
plt.show()
plt.figure(figsize=(10, 6))
plt.bar(df['State'], df['Male Avg. Monthly Wage (₹)'], label='Male', color='royalblue')
plt.bar(df['State'], df['Female Avg. Monthly Wage (₹)'], label='Female', color='pink', alpha=0.7)
plt.ylabel('Average Monthly Wage (₹)')
plt.title('Average Monthly Wages by Gender (2022-23)')
plt.legend()
plt.xticks(rotation=15)
plt.grid(axis='y', linestyle='--', alpha=0.7)
plt.show()
plt.figure(figsize=(10, 6))
plt.bar(df['State'], df['Informal Sector Share (%)'], color='green')
plt.ylabel('Informal Sector Share (%)')
plt.title('Informal Sector Share by State (2022-23)')
plt.xticks(rotation=15)
plt.grid(axis='y', linestyle='--', alpha=0.7)
plt.show()
```











Unemployment and Wage Disparities 2023 – 24

State	Rural Unemployme nt Rate (%)	Unemploymen	Unemploymen	Male Avg.	Avg. Monthly	e Gap	Informa I Sector Share (%)
Uttar Pradesh	2.7	6.0	10.2	15,700.55	6,800.70	56.7	70.5
Bihar	3.0	7.3	12.0	12,950.45	5,800.40	55.2	73.7
Maharashtra	2.8	6.1	9.5	18,900.30	11,500.20	39.2	64.3
Tamil Nadu	2.5	5.5	8.7	18,250.70	11,350.65	37.8	61.9
West Bengal	2.9	6.8	10.5	15,520.60	8,500.45	45.2	67.8

```
import pandas as pd
import matplotlib.pyplot as plt

data_2024 = {
    "State": ["Uttar Pradesh", "Bihar", "Maharashtra", "Tamil Nadu", "West Bengal"],
    "Rural Unemployment Rate (%)": [2.7, 3.0, 2.8, 2.5, 2.9],
    "Urban Unemployment Rate (%)": [6.0, 7.3, 6.1, 5.5, 6.8],
    "Youth Unemployment Rate (%)": [10.2, 12.0, 9.5, 8.7, 10.5],
    "Male Avg. Monthly Wage (₹)": [15700.55, 12950.45, 18900.30, 18250.70, 15520.60],
    "Female Avg. Monthly Wage (₹)": [6800.70, 5800.40, 11500.20, 11350.65, 8500.45],
    "Wage Gap (%)": [56.7, 55.2, 39.2, 37.8, 45.2],
    "Informal Sector Share (%)": [70.5, 73.7, 64.3, 61.9, 67.8]
}

df = pd.DataFrame(data_2024)
```

```
plt.figure(figsize=(10, 6))
plt.bar(df['State'], df['Rural Unemployment Rate (%)'], label='Rural Unemployment Rate',
color='skyblue')
plt.bar(df['State'], df['Urban Unemployment Rate (%)'], label='Urban Unemployment Rate',
color='orange', alpha=0.7)
plt.ylabel('Unemployment Rate (%)')
plt.title('Rural and Urban Unemployment Rate by State (2023-24)')
plt.legend()
plt.xticks(rotation=15)
plt.grid(axis='y', linestyle='--', alpha=0.7)
plt.show()
plt.figure(figsize=(10, 6))
plt.bar(df['State'], df['Male Avg. Monthly Wage (₹)'], label='Male', color='royalblue')
plt.bar(df['State'], df['Female Avg. Monthly Wage (₹)'], label='Female', color='pink', alpha=0.7)
plt.ylabel('Average Monthly Wage (₹)')
plt.title('Average Monthly Wages by Gender (2023-24)')
plt.legend()
plt.xticks(rotation=15)
plt.grid(axis='y', linestyle='--', alpha=0.7)
plt.show()
plt.figure(figsize=(10, 6))
plt.bar(df['State'], df['Informal Sector Share (%)'], color='green')
plt.ylabel('Informal Sector Share (%)')
plt.title('Informal Sector Share by State (2023-24)')
plt.xticks(rotation=15)
plt.grid(axis='y', linestyle='--', alpha=0.7)
plt.show()
```

Rural and Urban Unemployment Rate by State (2023-24)

