```python
import numpy as np
import matplotlib.pyplot as plt
import pandas as pd
from matplotlib import pyplot as plt
import seaborn as sns
import matplotlib.dates as mdates


# Dataset
dataset = {
    'Month': ['January', 'February', 'March', 'April', 'May', 'June', 'July', 'August', 'September', 'October', 'November', 'December'],
    '1981-1990': [60, 117, 239, 336, 147, 151, 99, 30, 182, 366, 307, 278],
    '1991-2000': [107, 150, 113, 317, 229, 464, 358, 385, 354, 492, 321, 224],
    '2001-2010': [328, 354, 435, 429, 242, 108, 166, 23, 38, 364, 376, 229]
}

#"Convert month to a number.
angka_bulan = [str(i + 1) for i in range(len(dataset['Month']))]

# Creating separate bar chart visualizations
plt.figure(figsize=(16, 8))

x = np.arange(len(dataset['Month']))
width = 0.2
colors = ['purple', 'orange', 'brown']

for i, stasiun in enumerate(dataset.keys()):
    if stasiun != 'Month':
        plt.bar(x + (i * width), dataset[stasiun], width=width, label=stasiun, color=colors[i % len(colors)])

plt.xlabel('Month')
plt.ylabel('Rainfall (mm)')
plt.title('Statistical Data')

#Use month as the label"
plt.xticks(x, angka_bulan)
plt.legend()
plt.show()
```
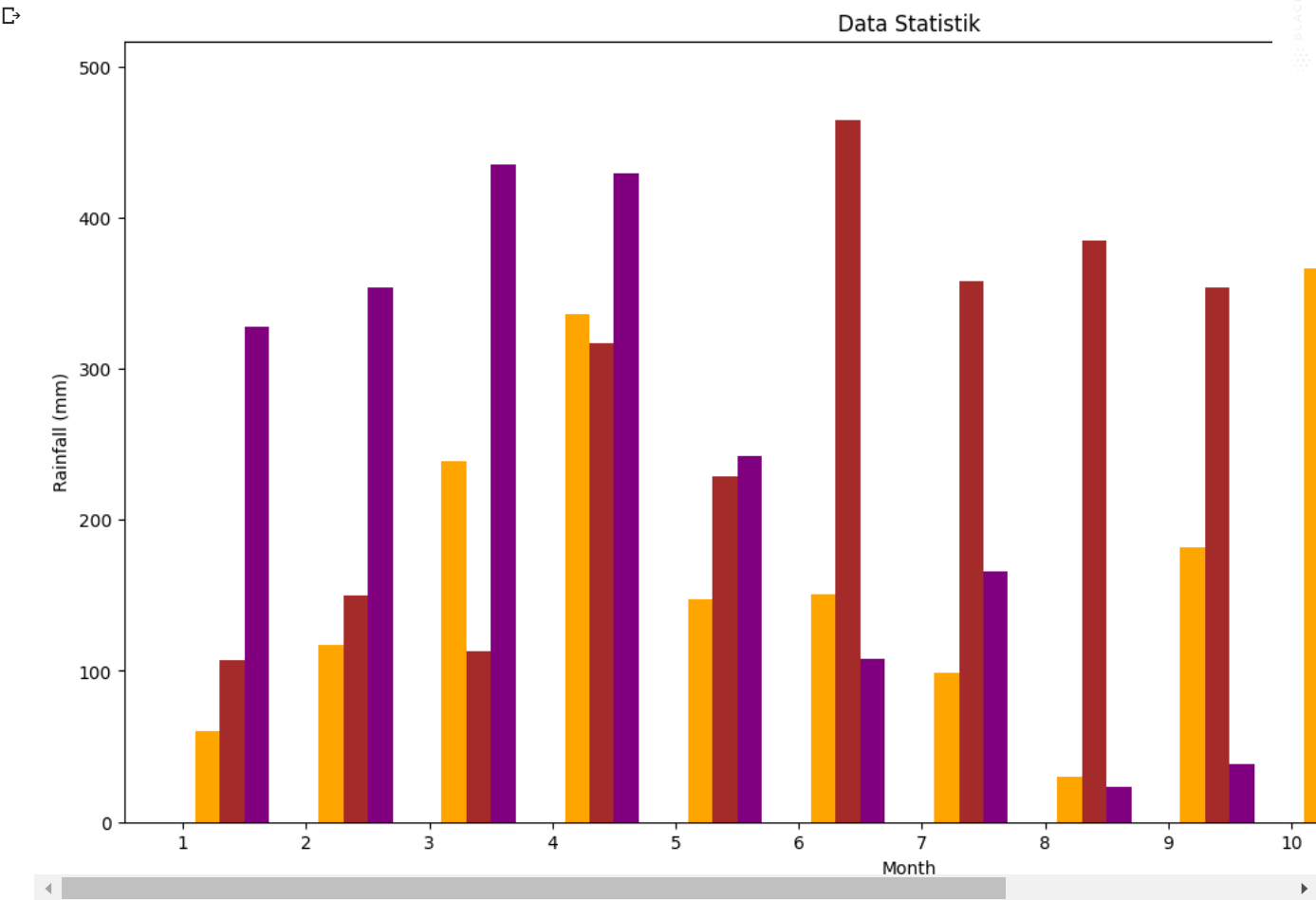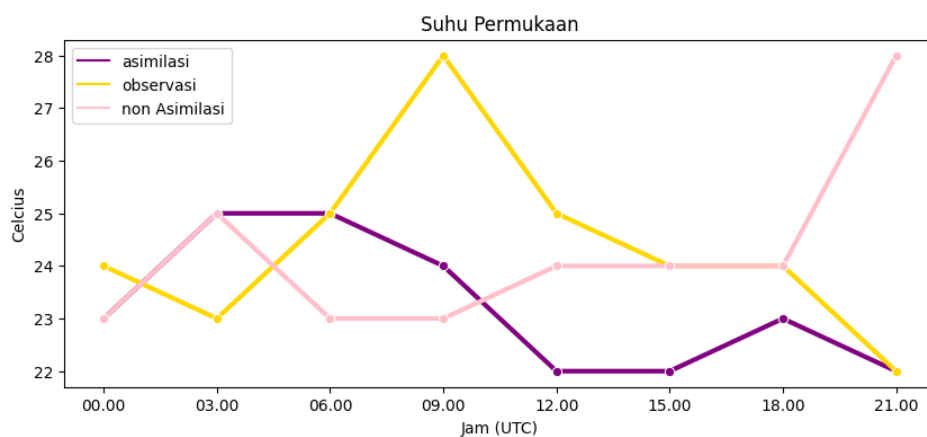


```python
# Dataset
data = {
    'jam (UTC)': ['00.00', '03.00', '06.00', '09.00', '12.00', '15.00', '18.00', '21.00'],
```

```
        'asimilasi': [23, 25, 25, 24, 22, 22, 23, 22],
        'observasi': [24, 23, 25, 28, 25, 24, 24, 22],
        'non Asimilasi': [23, 25, 23, 23, 24, 24, 24, 28]
}

df = pd.DataFrame(data)

# Melt the dataframe to transform its data structure.
df_melt = pd.melt(df, id_vars='jam (UTC)', var_name='Kategori', value_name='Jumlah')

#Displaying a graph using Seaborn
plt.figure(figsize=(10, 4))
sns.lineplot(data=df_melt, x='jam (UTC)', y='Jumlah', hue='Kategori', palette={'asimilasi': 'purple', 'observasi': 'gold', 'non Asimilasi

plt.xlabel('Jam (UTC)')
plt.ylabel('Celcius')
plt.title('Suhu Permukaan')

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

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