

# Assignment 03 - AI Prompts

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## ! Important

CAN YOU GIVE ME COLOR TO PLOT SCATTER PLOT FOR 6 GROUPS IN PLOTLY - #E0FFFF #B0E0E6 #AFEEEE #FFE4E1 #FFFACD #D8BFD8

## 💡 Tip

Absolutely! Those hex codes you've chosen form a soft, pastel palette that works beautifully for visualizing distinct groups in a scatter plot. Here's how you can use them in Plotly:

### 0.1 Color Palette for 6 Groups

These hex codes correspond to gentle tones that are easy on the eyes and offer good contrast:

| Group | Color Name    | Hex Code |
|-------|---------------|----------|
| 1     | Baby Blue     | #E0FFFF  |
| 2     | Powder Blue   | #B0E0E6  |
| 3     | Blizzard Blue | #AFEEEE  |
| 4     | Light Pink    | #FFE4E1  |
| 5     | Lemon Chiffon | #FFFACD  |
| 6     | Thistle       | #D8BFD8  |

## 0.2 Example in Plotly (Python)

Here's how you can apply these colors in a scatter plot using Plotly:

```
import plotly.express as px
import pandas as pd

# Sample data
df = pd.DataFrame({
    'x': [1, 2, 3, 4, 5, 6],
    'y': [10, 15, 13, 17, 14, 16],
    'group': ['A', 'B', 'C', 'D', 'E', 'F']
})

# Define color mapping
color_map = {
    'A': '#E0FFFF',
    'B': '#B0E0E6',
    'C': '#AFEEEE',
    'D': '#FFE4E1',
    'E': '#FFACD',
    'F': '#D8BFD8'
}

# Plot
fig = px.scatter(df, x='x', y='y', color='group',
                 color_discrete_map=color_map,
                 title='Scatter Plot with Custom Colors')
fig.show()
```

This will give each group a distinct pastel shade, making your plot both informative and visually appealing. Want help customizing marker shapes or adding hover info? I've got you covered.