

Part 1: Setup & Exploration (10 mins)

Tasks:

1. Import seaborn, pandas, and matplotlib.pyplot.
 2. Load the built-in **tips** dataset.
 3. Display the first 5 rows using `.head()`.
 4. Check basic stats using `.describe()`.
-

Part 2: Distribution Plots (15 mins)

Tasks:

1. Create a histogram of `total_bill` using `sns.histplot()`.
 2. Plot a KDE (smoothed curve) for `tip` using `sns.kdeplot()`.
 3. Create a combined distribution plot with histogram + KDE for `total_bill`.
-

Part 3: Categorical Plots (20 mins)

Tasks:

1. Use `sns.boxplot()` to show `total_bill` across different days.
 2. Use `sns.violinplot()` to compare `total_bill` distribution by sex.
 3. Create a `stripplot()` of `total_bill` by day, colored by sex, with `jitter=True`.
 4. Bonus: Combine a `violinplot()` and `stripplot()` using `ax = plt.gca()`.
-

Part 4: Relationship Plots (15 mins)

Tasks:

1. Create a `scatterplot()` of `total_bill` vs `tip`, colored by `smoker`.
 2. Use `sns.pairplot()` with `hue='sex'` to explore relationships.
 3. Use `sns.jointplot()` (`kind='reg'`) to show `total_bill` vs `tip` with regression.
-

Part 5: Correlation Heatmap (10 mins)

Tasks:

1. Load the built-in titanic dataset.
2. Drop any non-numeric columns.
3. Compute the `.corr()` matrix.
4. Plot a heatmap with:
 - `annot=True`
 - `cmap="coolwarm"`
 - `linewidths=0.5`