Multiple Regression

Case Study: Caesars Entertainment Hotel Staffing (Dataset Attached)

Scenario:
Caesars is trying to predict optimal staffing levels using variables like occupancy rate, day of the week, and event schedules.

Tasks:

1. Analyze a dataset with staffing level, occupancy, and event status

2. Perform multiple regression:

   o   Use dummy variables for weekends/events

   o   Include lagged variables if applicable

3. Evaluate model fit and predictive power

4. Recommend a staffing strategy based on the regression output

Learning Outcome:

- Apply and interpret multiple regression

- Improve managerial decisions using complex models in Excel