Day 1 Section 2 Exercise

Restaurant Recommendation

Group Exercise

Your team has been hired by a popular food delivery app to build an AI recommendation system. You have data from 100 customers who have rated restaurants. Your challenge is to build a model that can predict what new customers will like.

Use restaurant-data-csv.txt for sample data

Instructions for Participants:

Split the data into 2 files. 1 file (Train) will have 80 rows which will be used for training, and another file (Test) will have the rest of the 20 rows. You will not investigate the test file

Part 1: Building our AI model

Step 1:

Examine the 80 customer profiles in your training dataset. Each profile contains:

- **Age Group:** 18-24, 25-34, 35-44, 45-54
- **Income Level:** Low, Medium, High
- **Price Range Preference:** $ (budget), $$ (moderate), $$$ (premium)
- **Cuisine Preference:** Italian, Asian, American
- **Dietary Restrictions:** None, Vegetarian, Gluten-Free
- **Dining Occasion:** Casual, Date, Business, Special

Step 2:

Discuss as a team:

- **What patterns do you notice in the data?**
- **Which factors seem most important for predictions?**
- **Are there any strong correlations?**

and create the following sheet with 2-3 rules

	Description
Rule 1	
Rule 2	
Rule 3	

For example, one rule can be

"If the customer is aged 18-24 AND has low income, recommend American cuisine"

Part 2: Testing our model

Apply Your Rules

- **For each test customer, use your rules to predict their restaurant preference**
- **Check your prediction against their actual preference**
- **Mark whether you were correct (✓) or incorrect (✗)**

Calculate Your Accuracy

Correct Predictions: _____ out of 20

Accuracy Percentage: (_____ ÷ 20) × 100 = _____%