MSBA7003 Decision Analytics Group Project – Selling Ice Creams

Problem Description

- **SKU Diversity**: There are 10 different SKUs, with their respective costs provided.
- **Pricing Authority**: You have complete pricing power and flexibility for each SKU.
- **Customer Insight**: You do not have information regarding customer preferences or their willingness to pay (WTP).
- **Inventory Status:** Inventory is always sufficient.
- **Pricing Periods:** There are a total of two periods in this project. You are required to set the prices for each SKU during the two periods. The price for each item remains constant throughout each period.

Data Description

- **Initial Pricing Data:** The historical prices before the first period are provided.
- **Sales Data:** The dataset includes sales data before the first period, during which 100 customers visited the store.
- **Purchase Behavior:** Customers purchase at most one SKU. Specifically, they purchase the item that offers the highest value (value = WTP - prices). If no item provides a positive value, customers choose not to purchase anything.

Important Dates

- **Group Formation:** Form your group by September 14 and access the data.
- **First Pricing Submission:** Submit your prices for all ten products in the first period by September 27 and then receive the sales outcome.
- **Second Pricing Submission:** Submit prices for all ten products in the second period on October 8 (Session 10).

Performance Metrics

- **Project Grading:** Your grade for this project will depend on your total profit from two periods in comparison to the teacher's benchmark. In particular,

$$Your\ performance = \frac{Your\ total\ profit}{Teacher's\ benchmark}$$

Your performance	>= 0.9	>= 0.8	>= 0.7	>= 0.6	>= 0.5	other
Your grade	10	9	8	7	6	3

Teacher's benchmark will be revealed on October 8.