**Problem Solving 1**

**Loss & Profit Calculation**

**Scenario:**  
 A cake owner wants to make a program for his cake business. In this program, he wants to calculate profit and loss after selling a particular cake. For example, A cake owner sells five different flavors of cake in his website. The name of each cake is: black forest, Vanilla cake, Red Velvet, Lemon Sponge Cake, and Chocolate Cake. To make these cakes, the owner has to pay different types of inventory cost such as raw material cost (180, 150, 220, 165, 170 for each cake pound, respectively) transportation cost (150 for each pound), utility cost (3% on material and transportation cost in total for each pound), space cost (50 for each pound) and staff cost (60 for each pound).

On the other hand, the selling price of the each cake is 780, 600, 800, 650, and 660, respectively, per pound. Suddenly, the owner gives 5% discount on first 3 cakes and 7% discount on rest of the cake. With the discount offer, Owner sells 5, 7, 10, 5, 9 pounds till today in total for each cake. Now, owner wants to calculate the below business questions using Python programming language. To do it, owner hires a Python programmer who can make software to estimate the below queries:

1. Owner wants to visualize the each cake flavor types

2. Owner wants to visualize the total inventory cost for each cake per pound

**Assignment 1**

3. Owner wants to visualize the selling price before discount for each cake per pound

4. Owner wants to visualize the selling price after discount for each cake per pound

5. Owner wants to estimate total amount of profit after sell for each cake

6. Owner wants to estimate % of profit/loss after sell for each cake

**Submission Process:** [**https://drive.google.com/file/d/1TEZveFjm66VVWj9TaaqgRxa4kw9BjlZo/view**](https://drive.google.com/file/d/1TEZveFjm66VVWj9TaaqgRxa4kw9BjlZo/view)

**Note: Just Upload your Code  
  
Deadline: 18th August – 11.59 am**