## **ISLAMIC UNIVERSITY OF TECHNOLOGY (IUT)**

## **ORGANISATION OF ISLAMIC COOPERATION (OIC)**

## **Department of Computer Science and Engineering (CSE)**

Course: 4108, Lab Task 9-2b

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IUTians do not have access to a good restaurant close to the university premises. Some fellow Ex-IUTians thought of solving the problem by starting a restaurant named "IUTeatUP". However, they have the capital to donate but not the time to create the database system to manage the inventory. You are tasked with this tedious task and you only know the language C. Create a structure to keep the information of the food items of "IUTeatUP". A food item contains the following information:

Food item name (character)
Food item code (whole number)
Ingredient List (ingredient)
Ingredient amount in grams (real number)
Food item price in Taka (real number)

A single food item can only have at most 7 (five) ingredients. The details of an ingredient are as follows:

Ingredient name (character)
Ingredient code (whole number)
Ingredient price per grams (real number)
Ingredient details (character)

Many food items can have a particular type of ingredients. The only difference in the same ingredient that are in different food items will be in the amount, e.g. the food item "burger" might require 200 gm of the ingredient "chicken meat" while the food item "chicken ball" might require 100 gm of the same ingredient ("chicken meat"). Therefore, it will be efficient to keep track unique ingredients and only maintain the amount given in each food item. Devise a way to create structures in order to meet the above-mentioned requirements.

## **Sample Scenario:**

Name: Chicken Burger

Code: 100239 Ingredient List:

- ->Chicken meat 200 gm
- ->Mustard 20 gm
- ->Lettuce 10 gm
- ->Bread/Flour 100 gm
- ->Onions 20 gm
- ->Cucumber 10 gm
- ->Tomato 10 gm

Price: 200 BDT