

Java Lab Assignment:

Title: Fruit and Vegetable Management System

Objective: To create a Java program for managing information about fruits and vegetables using classes, objects, and constructors.

Description: In this lab assignment, your task is to develop a simple fruit and vegetable management system that allows users to create new items, display information about items, and perform operations related to items.

Requirements:

1. Create a class named **Item** with the following attributes:
 - **name** (String): The name of the item (fruit or vegetable).
 - **type** (String): The type of the item (fruit or vegetable).
 - **price** (double): The price of the item.
2. Implement the following constructor and methods in the **Item** class:
 - **Constructor:** Initialize the name, type, and price of the item.
 - **Methods:** `getName()`, `getType()`, and `getPrice()` to get Name, Type and Price of the Item.
3. Create a class named **Inventory** to manage information about items. This class should contain an array (or list) of **Item** objects.
4. Implement the following methods in the **Inventory** class:
 - **addItem(Item item):** Method to add a new item to the inventory.
 - **displayItems():** Method to display information about all items in the inventory.
5. In the **Main** class, create objects of the **Item** class representing different fruits and vegetables and add them to an object of the **Inventory** class.
6. Perform the following operations on the inventory [As indicated in 4]:
 - Add several items to the inventory.
 - Display information about all items in the inventory.

Instructions:

1. Define a class named **Item** with attributes for name, type, and price. Implement the constructor to initialize these attributes.
2. Define a class named **Inventory** with an attribute to store a collection of items. Implement methods to add an item to the inventory and display information about all items in the inventory.

3. In the **Main** class, create objects of the **Item** class representing different fruits and vegetables and add them to an object of the **Inventory** class.
4. Perform the operations described above on the inventory.
5. Run the program and verify that the operations are performed correctly.