* + Exercise 5-6 – Ice Cream Stand
    - Goal:
      * To practice class inheritance by extending an existing class (Restaurant) to create a specialized version (IceCreamStand).
    - Purpose:
      * The goal is to understand how a subclass can reuse and expand the behavior of a parent class while adding new attributes and methods specific to the subclass.
    - Algorithm / Steps:
      * Start from the Restaurant class defined in Exercise 5-4.
      * Create a new subclass IceCreamStand that inherits from Restaurant.
      * Add a new attribute flavors – a list of available ice-cream flavors.
      * Create a method display\_flavors() that prints out all available flavors.
      * Instantiate IceCreamStand and call its methods to verify inheritance and new functionality.
    - Result:

A screenshot of a computer program

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* + Exercise 5-7 – Admin
    - Goal:
      * To learn how to extend a user class to create an administrator class with additional permissions.
    - Purpose:
      * This exercise demonstrates how subclasses can add new functionality in this case, defining admin privileges different from regular users.
    - Algorithm / Steps:
      * Start with the User class from Exercise 5-5.
      * Create a subclass Admin that inherits from User.
      * Add a new attribute privileges – a list of permissions specific to administrators.
      * Implement a method show\_privileges() to display these privileges.
      * Instantiate an Admin object and call the methods to confirm the privileges are shown correctly.
    - Result:

A screenshot of a computer program

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* + Exercise 5-8 – Privileges Class
    - Goal:
      * To understand and apply the concept of composition (a class containing another class as an attribute).
    - Purpose:
      * The goal is to refactor the previous exercise by separating the privileges attribute into its own class Privileges, improving clarity, modularity, and maintainability.
    - Algorithm / Steps:
      * Create a new class Privileges that stores a list of admin privileges.
      * Move the privilege-related code from Admin into this new class.
      * Add a show\_privileges() method to display the privileges.
      * Modify AdminWithPrivileges to include a Privileges object as an attribute.
      * Instantiate AdminWithPrivileges and call describe\_user() and privileges.show\_privileges().
    - Result:

A screen shot of a computer program

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