Case Study 1 :

In an outlet, there can be several counters, each one managed by a single Sales person selling a specific product . A customer approaches any counter, depending on the product the customer wishes to purchase. The salesperson hands over the product and accepts the payment from the customer. Identify the classes, their attributes and operations in that classes.

Case Study 2 :

MoonRefrigirators company, a refrigerators manufacturing company manufactures a large number of refrigerators. A refrigerator possesses certain features and attributes and must behave in a certain manner. The company documents these attributes as a blueprint, which is used to manufacture the refrigerator.

1. What is this blueprint called in an object-oriented programming language?

Identify the class and objects and the various attributes of an object of the class.

2. The manufacturer does not want that a user should tamper with the electrical wiring in the refrigerator, and hence must be hidden from the user. Identify the feature of object-oriented programming that best describes the feature of data or information hiding.

3. A person operation the refrigerator need not know the details of how the refrigerator works. The person just needs to know how to switch on and off an oven, and change the temperature settings. Identify the feature OOPS that allows the user to ignore the irrelevant details of working of a refrigerator and concentrate on the essentials.

4. All refrigerators have certain common attributes and functionality. For example every refrigerator has a door. Different companies add various additional features to the basic functionality of a refrigerator. Identify a subclass of the Refrigerator class. Identify the property OOPS, in which the existing features of a class can be reused by another class and what is its advantage.