The Food class is the top class of the food item Hierarchy it is for holding the methods required to create different kinds of Food objects. It holds the main constructor for all Food objects and all the common methods for Perishable and Non-Perishable.

Methods in Food:

The isPerishable method which is for checking if the Food object is perishable

The getCurrentMachine is for seeing which machine a Food object is currently in

The setCurrent machine is for changing which machine a Food object is currently in

The Perishable class is a sub class of Food but is still a super class itself. It is used to hold the methods required for the creation and spoilage of the Perishable Food objects.

Methods in Perishable:

The incrementAge method is for aging the Food object until it spoils

The isSpoiled method is for checking if the Food object is spoiled

The spoil method is for removing spoiled Food objects from the system

The Cheese and Blue Cheese Classes are a Perishable Food objects. They are both Food objects that is Perishable that means after their spoil time has passed they are spoiled and much be removed from the system.

The Non-perishable class is a sub class of Food but is still a super class itself. It is used to create Non-perishable Food objects. Which is the same as Perishable but with less methods. This is why the constructor only calls the super class and need no further input.

The Soup Power Class is a Non-perishable Food object. Soup Power is a Non-Perishable Food object this means that no matter how long it takes to be processed it will never spoil allowing to be in a queue for an indefinite amount of time.