

# Day65 Store coding activity

Due Wednesday 2/28/24

Today in class we're going to write 3 classes to represent a store: Product, Dairy, and Alcohol. Put all of the classes into the repl I gave you.

## Product

Variables:

String **name**  
double **cost**

Methods:

Constructor: Product(String n, double c): creates a product with given name,  
if  $c < 0$  sets cost to 0  
String toString(): returns name + ", \$" + cost

## Dairy extends Product

Variables:

String **expiration**

Methods:

Constructor: Dairy(String n, double c, int y, int m, int d): creates a product with  
given name and cost, sets String expiration to date "m/d/y". Use the super() call as  
the first line of the Dairy constructor.  
String toString(): Use super.toString() then add ", expires: " + expiration;

## Alcohol extends Product

Methods:

Constructor: Alcohol(String n, double c): creates a product with given name and  
cost use the super() call.  
String toString(): Use super.toString() then add ", must be 21 or over"

I gave you four test cases in the main method up above. By default only the Product test cases are ready to run (uncomment the other cases as you get the classes done.) When you run all of the test code in the correct output will be:

```
Turkey Jerky, $3.25  
Promotional Flyer, $0.0  
Nonfat Yogurt, $2.89, Expires: 2/26/20  
Lagunitas, $10.99, must be 21 or over
```

Add your own products (1 of each type, a Product, a Dairy, and an Alcohol) to the runner and make sure your code works. In the end your runner creates and prints seven lines (my 4 and your 3).

Checklist, to make sure you are done:

1. You wrote the Product class. It runs the test code and prints the Turkey Jerkey and flyer.
2. You write the Dairy class. Uncomment the Dairy test, verify it now also prints the yogurt.
3. You write the Alcohol class. Uncomment the last test, verify it prints the beer.
4. Add your own 3 tests: one of each type: Product, Dairy, Alcohol. Verify that they print. Your final output should be 7 lines.