# **Exercise 1: Time to Go Shopping!**

In this lesson, you have to make a class called Product and implement various methods in it.

# We'll cover the following Problem Statement Sample Input Sample Output

## Problem Statement #

A *class* named **Product** is given below. You need to define the following in it:

- The class constructor that takes the following as parameters in the exact order:
  - \_name : the name of the product.
  - **\_price**: the price of the product in dollars.
  - \_amount : the amount of that product available.
  - \_madeIn: the country the product is made in.

**Important Note:** All of the above-mentioned properties should be defined as **protected** properties in the constructor.

- In order to access the *protected* properties, the following methods need to be defined:
  - getName: returns the name.
  - getPrice: returns the price.
  - getAmount: returns the amount.
  - getMadeIn: returns the name of the country the product is made in.
  - o set Amount (num) : sets the value amount equal to the value nessed

- . Sets the value amount equal to the value passed.
- Lastly, you need to implement the following methods inside the class:
  - canSell(num): num will denote the amount of product that needs to be sold. The method checks if this amount or more is available. It'll return true if it does and false if the amount available is less than what needs to be sold.
  - sell(num): the method is used to sell num amount of a product. It should return the updated amount of product left after selling. If the amount of product available is less than num, it should restock the product by adding twice the amount requested to the previously available amount of product and should return this updated value.

∵Ö Show Hint

### Sample Input #

```
var product = new Product('Butter',50,10,'USA')
getName()
getPrice()
getAmount()
getMadeIn()
canSell(9)
sell(15)
sell(18)
```

### Sample Output #

```
Butter
50
10
USA
true
40
32
```

**Note:** The solution to this exercise is available in the code widget below. However, it'll be good practice to solve this problem yourself first. Good luck!

```
class Product{
   //initialize constructor here
   //constructor should have protected properties defined
   //it should also have the get/set functions mentioned above

   //define the canSell function here

   //define the sell function here
}
```









