

# 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.

- `setAmount(num)` : 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.

 Show Hint

## Sample Input #

```
var product = new Product('Butter',50,10,'USA')
getName()
getPrice()
getAmount()
getMadeIn()
canSell(9)
sell(15)
sell(8)
```

## 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

However, it is a good practice to solve this problem, you can find. 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  
}
```

