

# Challenge 1: Implement the Derived Class

Can you Implement the Derived Class function by using the Base Class functions? A solution is placed in the solution section to help you, but we would suggest you try to solve it on your own first.

## WE'LL COVER THE FOLLOWING ^

- Problem Statement
  - Sample Input
  - Sample Output
- Coding Exercise

## Problem Statement #

You have to implement a method `GetDetails()` in the **Derived Class** `Beverage`, which inherits from the `Product` class.

- An auto-implemented property `Liters` of type `int` is declared in the `Beverage` class.
- Modify the declaration of the `Beverage` class so that it inherits from the `Product` class.
- In the implementation of `GetDetails()` method, you must append and return the `Liters` along with the corresponding beverage's `_name` and `_price` values inherited from the base class, in the form of a string.
- We have already implemented the **Base Class** `Product` with the getters namely:
  - `GetName(int liters)` - you have to pass the liters as a parameter to get the respective name of the `Beverage`
  - `GetPrice(int liters)` - you have to pass the liters as a parameter to get the respective price of the `Beverage`.

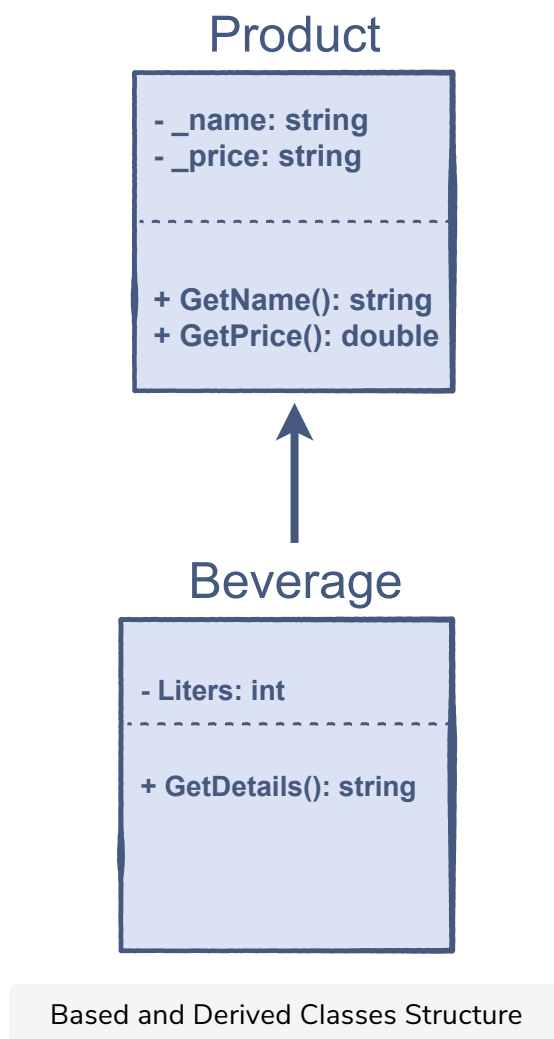
These getters return the name and price of the beverage.

## Sample Input #

```
Beverage cola = new Beverage();  
cola.Litres = 1;
```

## Sample Output #

```
cola.GetDetails() = "Cola, 2, 1"
```



## Coding Exercise #

First, take a close look and design a step-by-step algorithm before jumping to the implementation. This problem is designed for practice, so try to solve it on your own. If you get stuck, you can always refer to the solution provided in the solution review.

**Good luck!**

```
// Derived Class
class Beverage {
```



```
    public int Liters { get; set; } // Liters of a Beverage
```

```
    // This function calls the Base class getters and prepends the values to the Litres
```

```
    public String GetDetails() {
        string details = "";
```

```
        // write your code here
```

```
        // Return format should be "name, price, liters"
```

```
        return details;
```

```
    }
```

```
}
```



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The solution will be explained in the next lesson.