# Programming Test C#

What is expected from this coding test:

1. Needs to maintain clean code in the solution. Reference [link](https://medium.com/@adhiksubash/implementing-clean-code-and-solid-principles-in-c-b65d110ac045)
2. Unit test code coverage is required to cover both positive/negative scenarios. Please consider [TestCase] attribute in NUnit to execute a test method multiple times with different input parameters, effectively covering multiple test scenarios with a single test method
3. Make sure all unit tests were working and solution builds successfully.
4. Please maintain method and parameters as per problem statement. Method names like AcceptCoin & SelectProduct etc.
5. Make sure code covered all the required functionality given below in the problem statement.
6. Please share the code in public git repo with required access.

# Vending Machine Problem statement:

You need to build a vending machine which will accept money, and dispense products.

# Features

## Accept Coins

As a vendor  
I want a vending machine that accepts coins  
So that I can collect money from the customer

The vending machine will accept valid coins (nickels(0.05 $), dimes (0.1 $), and quarters(0.25 $)) and reject invalid ones (pennies(0.01 $)). When a valid coin is inserted the amount of the coin will be added to the current amount and the display will be updated. When there are no coins inserted, the machine displays INSERT COIN. Rejected coins are placed in the coin return.

NOTE: The temptation here will be to create Coin objects that know their value. However, this is not how a real vending machine works. Instead, it identifies coins by their weight and size and then assigns a value to what was inserted. You will need to do something similar. This can be simulated using strings, constants, enums, symbols, or something of that nature.

## Select Product

As a vendor  
I want customers to select products  
So that I can give them an incentive to put money in the machine

There are three products: cola for $1.00, chips for $0.50, and candy for $0.65. When the respective button is pressed and enough money has been inserted, the product is dispensed and the machine displays THANK YOU. If the display is checked again, it will display INSERT COIN and the current amount will be set to $0.00. If there is not enough money inserted then the machine displays PRICE and the price of the item and subsequent checks of the display will display either INSERT COIN or the current amount as appropriate.