

TDD LAB

Overview: You will receive a file with the code. Use TDD practices to write tests and complete the code.

Task:

1. The ChangeHandler class allows users to insert coins into a vending machine and calculates the correct coins to give in change. Complete this class.
2. Note that all amounts are counted in cents, not dollars.
3. Write tests to ensure ChangeHandler is working correctly.

Required Test Cases

5. **Constructor:**
 - a. amountDue is set based on an argument.
 - b. cashTendered is set to zero.
6. **insertCoin:**
 - a. Inserting a quarter adds 25.
 - b. Inserting a dime adds 10.
 - c. Inserting a nickel adds 5.
 - d. Inserting a penny adds 1.
 - e. Calling function multiple times continues to add on to the amount.
7. **isPaymentSufficient:**
 - a. Returns true if cashTendered more than amountDue.
 - b. Returns false if cashTendered less than amountDue.
 - c. Returns true if cashTendered equal to amountDue.
8. **giveChange:**
 - a. 32 change produces: quarters: 1, dimes: 0, nickels: 1, pennies: 2.
 - b. 10 change produces: quarters: 0, dimes: 1, nickels: 0, pennies: 0.
 - c. 27 change produces: quarters: 1, dimes: 0, nickels: 0, pennies: 2.
 - d. 68 change produces: quarters: 2, dimes: 1, nickels: 1, pennies: 3.

Continued on next page...

