**TEST SCRIPT**

# VendingMachineGUI

| **Method** | **#** | **Test Description** | **Sample Input Data** | **Expected Output** | **Actual Output** | **P/F** |
| --- | --- | --- | --- | --- | --- | --- |
| run() | 1 | User chooses to exit the program after running it | Click exit button | Program terminates | Program terminates | P |
|  | 2 | User chooses to create a vending machine | Click create vending machine button | Displays vending machine options | Displays vending machine options | P |
| showVendingMachineOptions() | 1 | User chooses to go back to main menu | Click back to main menu button | Displays the Vending Machine frame (from method run()) | Displays the Vending Machine frame (from method run()) | P |
|  | 2 | User chooses to create a regular vending machine | Click Regular Vending Machine button | Displays the buttons for regular vending machine | Displays the buttons for regular vending machine | P |
|  | 3 | User chooses to create a special vending machine | Click Special Vending Machine button | Displays the buttons for special vending machine | Displays the buttons for regular special machine | P |

# RegularVMGUI

| **Method** | **#** | **Test Description** | **Sample Input Data** | **Expected Output** | **Actual Output** | **P/F** |
| --- | --- | --- | --- | --- | --- | --- |
| initializeGUI() | 1 | User chooses to purchase an item with change before replenishing money denomination | Click on purchase item button, click on ube, amount paid is 400 | Insufficient funds. Transaction cancelled. | Insufficient funds. Transaction cancelled. | P |
|  | 2 | User chooses to purchase an item without change before replenishing money denomination | Click on purchase item button, click on ube, amount paid is 385 | Dispensing item: Ube | Dispensing item: Ube | P |
|  | 3 | User chooses to purchase an item with change after replenishing money denomination | Click on perform maintenance operation, click on replenish money denomination, click ok, click purchase item button, click on ube, amount paid is 400 | Dispensing item: Ube  Change: P15.00  Give 1 of 10 denomination  Give 1 of 5 denomination | Dispensing item: Ube  Change: P15.00  Give 1 of 10 denomination  Give 1 of 5 denomination | P |
|  | 4 | User chooses to display transaction history after purchasing 2 ube | Click on display transaction history button | Ube: Quantity Sold is 2  Leche Flan: Quantity Sold is 0  Banana: Quantity Sold is 0  Ice: Quantity Sold is 0  Condensed Milk: Quantity Sold is 0  Sugar: Quantity Sold is 0  Macapuno: Quantity Sold is 0  Nata de Coco: Quantity Sold is 0  Total Sales: 770.0 | Ube: Quantity Sold is 2  Leche Flan: Quantity Sold is 0  Banana: Quantity Sold is 0  Ice: Quantity Sold is 0  Condensed Milk: Quantity Sold is 0  Sugar: Quantity Sold is 0  Macapuno: Quantity Sold is 0  Nata de Coco: Quantity Sold is 0  Total Sales: 770.0 | P |
|  | 5 | User chooses to go back to main menu | Click on back to main menu | Displays the Vending Machine frame | Displays the Vending Machine frame | P |
| purchaseItemGUI() | 1 | User chooses to purchase an ube | Click on slot 1, the first button | Prompts user to enter their payment | Prompts user to enter their payment | P |
|  | 2 | User chooses to purchase an banana | Click on slot 3, the third button | Prompts user to enter their payment | Prompts user to enter their payment | P |
|  | 3 | User chooses to purchase an leche flan | Click on slot 2, the second button | Prompts user to enter their payment | Prompts user to enter their payment | P |
| showPurchase() | 1 | User chooses to purchase nata de coco but with insufficient payment | Click on purchase item, click on nata de coco, pay 50 pesos | Insufficient funds. Transaction cancelled. | Insufficient funds. Transaction cancelled. | P |
|  | 2 | User chooses to purchase banana with more than enough payment but denominations are not replenished yet | Click on purchase item, click on banana, pay 200 pesos | Insufficient funds. Transaction cancelled. | Insufficient funds. Transaction cancelled. | P |
|  | 3 | User chooses to purchase an item but then clicks on the exit button | Click purchase item, click the X button of purchase options | Displays regular vending machine | Displays regular vending machine | P |
| performMaintenance() | 1 | User chooses to perform maintenance operations to restock an item which does not need restocking | Click on perform maintenance operation, click restock item, slot number of item is 2, quantity of item is 1 | Exceeded the number of items required to replenish items. Restocking cancelled. | Exceeded the number of items required to replenish items. Restocking cancelled. | P |
|  | 2 | User chooses to replenish money denominations after creating a regular vending machine | Click on perform maintenance operation, click on replenish money denomination | Money denominations replenished. | Money denominations replenished. | P |
|  | 3 | User chooses to print transaction history when they have not purchased anything yet | Click on perform maintenance, click on print transaction history | Ube: Quantity Sold is 0  Leche Flan: Quantity Sold is 0  Banana: Quantity Sold is 0  Ice: Quantity Sold is 0  Condensed Milk: Quantity Sold is 0  Sugar: Quantity Sold is 0  Macapuno: Quantity Sold is 0  Nata de Coco: Quantity Sold is 0  Total Sales: 0.0 | Ube: Quantity Sold is 0  Leche Flan: Quantity Sold is 0  Banana: Quantity Sold is 0  Ice: Quantity Sold is 0  Condensed Milk: Quantity Sold is 0  Sugar: Quantity Sold is 0  Macapuno: Quantity Sold is 0  Nata de Coco: Quantity Sold is 0  Total Sales: 0.0 | P |
| displayTransactionHistory() | 1 | User chooses to display transaction history when they have not purchased anything | Click on display transaction history button | Ube: Quantity Sold is 0  Leche Flan: Quantity Sold is 0  Banana: Quantity Sold is 0  Ice: Quantity Sold is 0  Condensed Milk: Quantity Sold is 0  Sugar: Quantity Sold is 0  Macapuno: Quantity Sold is 0  Nata de Coco: Quantity Sold is 0  Total Sales: 0.0 | Ube: Quantity Sold is 0  Leche Flan: Quantity Sold is 0  Banana: Quantity Sold is 0  Ice: Quantity Sold is 0  Condensed Milk: Quantity Sold is 0  Sugar: Quantity Sold is 0  Macapuno: Quantity Sold is 0  Nata de Coco: Quantity Sold is 0  Total Sales: 0.0 | P |
|  | 2 | User chooses to display transaction history after purchasing an ube | Click on ube, amount paid is 385 | Ube: Quantity Sold is 1  Leche Flan: Quantity Sold is 0  Banana: Quantity Sold is 0  Ice: Quantity Sold is 0  Condensed Milk: Quantity Sold is 0  Sugar: Quantity Sold is 0  Macapuno: Quantity Sold is 0  Nata de Coco: Quantity Sold is 0  Total Sales: 385.0 | Ube: Quantity Sold is 1  Leche Flan: Quantity Sold is 0  Banana: Quantity Sold is 0  Ice: Quantity Sold is 0  Condensed Milk: Quantity Sold is 0  Sugar: Quantity Sold is 0  Macapuno: Quantity Sold is 0  Nata de Coco: Quantity Sold is 0  Total Sales: 385.0 | P |
|  | 3 | User chooses to display transaction history after purchasing one of every item (note: dispensing item is done one at a time, so user needs to pay for the first item before purchasing the next one) | Click on an item and pay the exact amount | Ube: Quantity Sold is 1  Leche Flan: Quantity Sold is 1  Banana: Quantity Sold is 1  Ice: Quantity Sold is 1  Condensed Milk: Quantity Sold is 1  Sugar: Quantity Sold is 1  Macapuno: Quantity Sold is 1  Nata de Coco: Quantity Sold is 1  Total Sales: 1067.0 | Ube: Quantity Sold is 1  Leche Flan: Quantity Sold is 1  Banana: Quantity Sold is 1  Ice: Quantity Sold is 1  Condensed Milk: Quantity Sold is 1  Sugar: Quantity Sold is 1  Macapuno: Quantity Sold is 1  Nata de Coco: Quantity Sold is 1  Total Sales: 1067.0 | P |

# RegularVM

| **Method** | **#** | **Test Description** | **Sample Input Data** | **Expected Output** | **Actual Output** | **P/F** |
| --- | --- | --- | --- | --- | --- | --- |
| change() | 1 | Returns the change of the valid user amount that is more than the price of the item and the denominations are replenished | Clicks on slot 4 (Ice - Php 5) and entered the amount 10 as the user amount | Change: P5.00 | Change P5.00 | P |
|  | 2 | Returns the change of the valid user amount that is the exact price of the item (condensed milk) and the denominations are not replenished | Click on slot 5 and pays 55 pesos | Dispensing item: Condensed Milk | Dispensing item: Condensed Milk | P |
|  | 3 | Returns the change of the valid user amount that is considerably larger than the price of the item (condensed milk) and the denominations are replenished | Click on slot 1 and pays 1000 pesos | Dispensing item: Ube  Change: P615  Give 1 of 500 peso denomination  Give 1 of 100 peso denomination  Give 1 of 10 peso denomination  Give 1 of 5 peso denomination | Dispensing item: Ube  Change: P615  Give 1 of 500 peso denomination  Give 1 of 100 peso denomination  Give 1 of 10 peso denomination  Give 1 of 5 peso denomination | P |
| updateMachine() | 1 | The user will buy Banana. The quantity of stocks will decrease and the total sales will be updated. | Clicks on Banana (Available: 10, Price: P125.0). | Ube: 10  Leche Flan: 10  Banana: 9  Ice: 10  Condensed Milk: 10  Sugar: 10  Macapuno: 10  Nata de Coco: 10 Total Sales: P125.0 | Ube: 10  Leche Flan: 10  Banana: 9  Ice: 10  Condensed Milk: 10  Sugar: 10  Macapuno: 10  Nata de Coco: 10 Total Sales: P125.0 | P |

# SpecialVMGUI

| **Method** | **#** | **Test Description** | **Sample Input Data** | **Expected Output** | **Actual Output** | **P/F** |
| --- | --- | --- | --- | --- | --- | --- |
| initializeGUI() | 1 | User chooses to purchase a product with change before replenishing money denomination | Click on purchase a product button, click on halo-halo, amount paid is 400.  Ube: 1  Banana: 2  Macapuno: 2  Condensed Milk: 1  Leche Flan: 2  Sugar: 2  Ice: 2  Nata de Coco: 2  Price of Halo-halo: P1694.0  Total Calories of Halo-Halo: 1750  Amount Paid: 2000 | Insufficient funds. Transaction cancelled. | Insufficient funds. Transaction cancelled. | P |
|  | 2 | User chooses to purchase a product without change before replenishing money denomination | Click on purchase a product button, click on halo-halo  Ube: 1  Banana: 2  Macapuno: 2  Condensed Milk: 1  Leche Flan: 2  Sugar: 2  Ice: 2  Nata de Coco: 2  Price of Halo-halo: P1694.0  Total Calories of Halo-Halo: 1750  Amount Paid: 1694 | Dispensing item: Halo-Halo | Dispensing item: Halo-Halo | P |
|  | 3 | User chooses to purchase a product with change after replenishing money denomination | Click on perform maintenance operation, click on replenish money denomination, click ok, click purchase a product button, click on halo-halo  Ube: 1  Banana: 2  Macapuno: 2  Condensed Milk: 1  Leche Flan: 2  Sugar: 2  Ice: 2  Nata de Coco: 2  Price of Halo-halo: P1694.0  Total Calories of Halo-Halo: 1750  Amount Paid: 2000 | Total Calories of Halo-Halo: 1750  Dispensing Product: Halo-Halo  Change: P306.0  Give 1 of 200 peso denomination  Give 1 of 100 peso denomination  Give 1 of 5 peso denomination  Give 1 of 1 peso denomination | Total Calories of Halo-Halo: 1750  Dispensing Product: Halo-Halo  Change: P306.0  Give 1 of 200 peso denomination  Give 1 of 100 peso denomination  Give 1 of 5 peso denomination  Give 1 of 1 peso denomination | P |
|  | 4 | User chooses to display transaction history after purchasing Halo-Halo  Ube: 1  Banana: 2  Macapuno: 2  Condensed Milk: 1  Leche Flan: 2  Sugar: 2  Ice: 2  Nata de Coco: 2 | Click on display transaction history button | Ube: Quantity Sold is 1  Leche Flan: Quantity Sold is 2  Banana: Quantity Sold is 2  Ice: Quantity Sold is 2  Condensed Milk: Quantity Sold is 1  Sugar: Quantity Sold is 2  Macapuno: Quantity Sold is 2  Nata de Coco: Quantity Sold is 2  Total Sales: 1694.0 | Ube: Quantity Sold is 1  Leche Flan: Quantity Sold is 2  Banana: Quantity Sold is 2  Ice: Quantity Sold is 2  Condensed Milk: Quantity Sold is 1  Sugar: Quantity Sold is 2  Macapuno: Quantity Sold is 2  Nata de Coco: Quantity Sold is 2  Total Sales: 1694.0 | P |
|  | 5 | User chooses to go back to main menu | Click on back to main menu | Displays the Vending Machine frame | Displays the Vending Machine frame | P |
| showPurchaseItemGUI() | 1 | User chooses to purchase an Macapuno | Click on slot 7, the seventh button | Prompts user to enter their payment | Prompts user to enter their payment | P |
|  | 2 | User chooses to purchase an Sugar | Click on slot 6, the sixth button | Prompts user to enter their payment | Prompts user to enter their payment | P |
|  | 3 | User chooses to purchase an Condensed Milk | Click on slot 5, the fifth button | Prompts user to enter their payment | Prompts user to enter their payment | P |
| purchaseItem() | 1 | User chooses to purchase Sugar but with insufficient payment | Click on purchase item, click on nata de coco, pay 80 pesos | Transaction Failed. Please try again. | Transaction Failed. Please try again. | P |
|  | 2 | User chooses to purchase Ice with more than enough payment but denominations are not replenished yet | Click on purchase item, click on banana, pay 10 pesos | Transaction Failed. Please try again. | Transaction Failed. Please try again. | P |
|  | 3 | User chooses to purchase an item but then clicks on the exit button | Click purchase item, click the X button of purchase options | Displays special vending machine | Displays special vending machine | P |
| showPurchaseOptions() | 1 | Allows the user customize the quantity of the products for Halo-Halo | Click on Purchase a Product then choose Halo-Halo | Ube: 1  Banana: 2  Macapuno: 2  Condensed Milk: 1  Leche Flan: 2  Sugar: 2  Ice: 2  Nata de Coco: 2  Confirm | Ube: 1  Banana: 2  Macapuno: 2  Condensed Milk: 1  Leche Flan: 2  Sugar: 2  Ice: 2  Nata de Coco: 2  Confirm | P |
|  | 2 | Allows the user customize the quantity of the products for Cream White Halo-Halo | Click on Purchase a Product then choose Creamy White Halo-Halo | Banana:2  Condensed Milk:2  Leche Flan:2  Ice:2 | Banana:2  Condensed Milk:2  Leche Flan:2  Ice:2 | P |
| showProductCustomization() | 1 | Shows the summary of the customized product of the user. The user chose Halo-Halo. | Click on Purchase a Product then choose Halo-Halo. After customizing, Click Confirm. | Preparing Product: Halo-Halo  Adding Ube  Adding Banana  Adding Banana  Adding Macapuno  Adding Macapuno  Adding Condensed Milk  Adding Leche Flan  Adding Leche Flan  Adding Sugar  Adding Sugar  Adding Ice  Adding Ice  Adding Nata de Coco  Adding Nata de Coco  Price of Halo-Halo: P1694.0  Total calories of Halo-Halo: 1750 | Preparing Product: Halo-Halo  Adding Ube  Adding Banana  Adding Banana  Adding Macapuno  Adding Macapuno  Adding Condensed Milk  Adding Leche Flan  Adding Leche Flan  Adding Sugar  Adding Sugar  Adding Ice  Adding Ice  Adding Nata de Coco  Adding Nata de Coco  Price of Halo-Halo: P1694.0  Total calories of Halo-Halo: 1750 | P |
|  | 2 | Shows the summary of the customized product of the user. The user chose Creamy White Halo-Halo. | Click on Purchase a Product then choose Creamy White Halo-Halo. After customizing, Click Confirm. | Preparing product: Creamy White Halo-Halo  Adding Banana  Adding Banana  Adding Condensed Milk  Adding Condensed Milk  Adding Leche Flan  Adding Leche Flan  Adding Ice  Adding Ice  Price of Creamy White Halo-Halo: P800.0  Total Calories of Creamy White Halo-Halo: 800 | Preparing product: Creamy White Halo-Halo  Adding Banana  Adding Banana  Adding Condensed Milk  Adding Condensed Milk  Adding Leche Flan  Adding Leche Flan  Adding Ice  Adding Ice  Price of Creamy White Halo-Halo: P800.0  Total Calories of Creamy White Halo-Halo: 800 | P |
| performMaintenance() | 1 | This is similar to performMaintenance() in RegularVMGUI | | | | |
| displayTransactionHistory() | 1 | This is similar to displayTransactionHistory() in RegularVMGUI | | | | |

# SpecialVM

| **Method** | **#** | **Test Description** | **Sample Input Data** | **Expected Output** | **Actual Output** | **P/F** |
| --- | --- | --- | --- | --- | --- | --- |
| createProduct() | 1 | Creates an array for the products created | List the Ingredients of Halo-Halo  Halo-Halo:  Ube  Banana  Macapuno  Condensed Milk  Leche Flan  Sugar  Ice  Nata de Coco | Halo-Halo:  Ube  Banana  Macapuno  Condensed Milk  Leche Flan  Sugar  Ice  Nata de Coco | Halo-Halo:  Ube  Banana  Macapuno  Condensed Milk  Leche Flan  Sugar  Ice  Nata de Coco | P |
| isValid() | 1 | Check if the quantity the user input is a negative number | Input: -1 | False | False | P |
|  | 2 | Check if the quantity the user input is zero | Input: 0 | False | False | P |
|  | 3 | Check if the quantity the user input is a positive number | Input: 2 | True | True | P |
| change() | 1 | Returns the change of the valid user amount | Clicks on Creamy White Halo-Halo and customized products  Banana: 1  Condensed Milk: 2  Leche Flan: 2  Ice: 2  Total Amount: P675.00  Amount Paid: 1000 | Change: P325.00 | Change P325.00 | P |
| updateMachine() | 1 | The user will buy Creamy White Halo-Halo. The quantity of stocks will decrease and the total sales will be updated. | Clicks on Creamy White Halo-Halo  Banana: 1  Condensed Milk: 2  Leche Flan: 2  Ice: 2  Total Amount: P675.00 | Creamy White Halo-Halo  Ube: 10  Leche Flan: 8  Banana: 9  Ice: 8  Condensed Milk: 8  Sugar: 10  Macapuno: 10  Nata de Coco: 10 Total Sales: P675.0 | Creamy White Halo-Halo  Ube: 10  Leche Flan: 8  Banana: 9  Ice: 8  Condensed Milk: 8  Sugar: 10  Macapuno: 10  Nata de Coco: 10 Total Sales: P675.0 | P |
| payment() | 1 | Handles the payment transactions | Clicks on Creamy White Halo-Halo  Banana: 1  Condensed Milk: 2  Leche Flan: 2  Ice: 2  Total Amount: P675.00 | Ube: Quantity Sold is 0  Leche Flan: Quantity Sold is 2  Banana: Quantity Sold is 1  Ice: Quantity Sold is 2  Condensed Milk: Quantity Sold is 2  Sugar: Quantity Sold is 0  Macapuno: Quantity Sold is 0  Nata de Coco: Quantity Sold is 0  Total Sales: 675.0 | Ube: Quantity Sold is 0  Leche Flan: Quantity Sold is 2  Banana: Quantity Sold is 1  Ice: Quantity Sold is 2  Condensed Milk: Quantity Sold is 2  Sugar: Quantity Sold is 0  Macapuno: Quantity Sold is 0  Nata de Coco: Quantity Sold is 0  Total Sales: 675.0 | P |
| purchaseItem() | 1 | Checks if the amount paid is greater than price of the item | Clicks on Creamy White Halo-Halo  Banana: 1  Condensed Milk: 2  Leche Flan: 2  Ice: 2  Total Amount: P675.00  Amount Paid: 700 | True | True | P |
| getProduct() | 1 | Getting the product class |  |  |  |  |

# MaintenanceVMGUI

| **Method** | **#** | **Test Description** | **Sample Input Data** | **Expected Output** | **Actual Output** | **P/F** |
| --- | --- | --- | --- | --- | --- | --- |
| initializeGUI() | 1 | User choose to Back to Machine option to go back to chosen Vending Machine | Click on Perform Maintenance Operation and Click Back to Machine | Displays Vending Machine | Displays Vending Machine | P |
| restockItem() | 1 | User chooses to restock item 1 with exceeded number | Clicks on restock item and input slot 1.  Input 12 for quantity number to restock | Exceeded the number of items required to replenish items. Restocking cancelled. | Exceeded the number of items required to replenish items. Restocking cancelled. | P |
| replenishMoneyDenomination() | 1 | User chooses to replenish money denomination | Click on Replenish Money Denomination | Money denominations replenished. | Money denominations replenished. | P |
| printTransactionHistory | 1 | User chooses to print the transaction history of the vending machine without buying anything | Click on Print Transaction History. | Ube: Quantity Sold is 0  Leche Flan: Quantity Sold is 0  Banana: Quantity Sold is 0  Ice: Quantity Sold is 0  Condensed Milk: Quantity Sold is 0  Sugar: Quantity Sold is 0  Macapuno: Quantity Sold is 0  Nata de Coco: Quantity Sold is 0  Total Sales: 0.0 | Ube: Quantity Sold is 0  Leche Flan: Quantity Sold is 0  Banana: Quantity Sold is 0  Ice: Quantity Sold is 0  Condensed Milk: Quantity Sold is 0  Sugar: Quantity Sold is 0  Macapuno: Quantity Sold is 0  Nata de Coco: Quantity Sold is 0  Total Sales: 0.0 | P |
| These methods similar to displayTransactionHistory() in RegularVMGUI & SpecialVMGUI | | | | | | |

# MaintenanceVM

| **Method** | **#** | **Test Description** | **Sample Input Data** | **Expected Output** | **Actual Output** | **P/F** |
| --- | --- | --- | --- | --- | --- | --- |
| performMaintenance() | 1 | User chooses to restock an item | Clicks on restock an item | Enter the slot number of the item to restock: | Enter the slot number of the item to restock: | P |
|  | 2 | User chooses to replenish money denomination | Clicks on Replenish Money Denomination | Money denominations replenished. | Money denominations replenished. | P |
|  | 3 | User chooses to go back to main menu | Clicks on Back to Machine | Maintenance Window exits | Maintenance Window exits | P |
| restock() | 1 | Restocks an Ube item even though the slot is full | Enter the slot number of the item to restock:  **1**  Enter the quantity to restock:  **1** | Exceeded the number of items required to replenish items. Restocking cancelled. | Exceeded the number of items required to replenish items. Restocking cancelled. | P |
|  | 2 | Restocks an Ube item when the slot is empty | Enter the slot number of the item to restock:  **1**  Enter the quantity to restock:  **10** | Restocked 10 Ube. | Restocked 10 Ube. | P |
|  | 3 | Restocks an Ice item when the slot is less than 10 but greater than 0 (e.g., 7 items available) | Enter the slot number of the item to restock:  **4**  Enter the quantity to restock:  **3** | Restocked 3 Ice. | Restocked 3 Ice. | P |
| replenishMoneyDenomination() | 1 | Do not replenish money denomination after creating a vending machine | Clicks on purchase an item and input amount greater than the price | Insufficient funds. Transaction cancelled. | Insufficient funds. Transaction cancelled. | P |
|  | 2 | Replenishes money denomination after creating a vending machine | 2 | Money denominations replenished. | Money denominations replenished. | P |
|  | 3 | Replenishes money denomination twice, consecutively. | 2 | Money denominations replenished. | Money denominations replenished. | P |
| printSummary() | 1 | Prints the overall transaction of the machine if the user bought Ube and ice. | Clicks on Ube with amount of P385.0 and Ice with amount of P5.0 | Ube: Quantity Sold is 1  Leche Flan: Quantity Sold is 0  Banana: Quantity Sold is 0  Ice: Quantity Sold is 1  Condensed Milk: Quantity Sold is 0  Sugar: Quantity Sold is 0  Macapuno: Quantity Sold is 0  Nata de Coco: Quantity Sold is 0  Total Sales: 390.0 | Ube: Quantity Sold is 1  Leche Flan: Quantity Sold is 0  Banana: Quantity Sold is 0  Ice: Quantity Sold is 1  Condensed Milk: Quantity Sold is 0  Sugar: Quantity Sold is 0  Macapuno: Quantity Sold is 0  Nata de Coco: Quantity Sold is 0  Total Sales: 390.0 | P |

# HandlePayment

| **Method** | **#** | **Test Description** | **Sample Input Data** | **Expected Output** | **Actual Output** | **P/F** |
| --- | --- | --- | --- | --- | --- | --- |
| handlePayment() | 1 | Designed for RegularVM. Checks if the payment to the user is successful or not when buying Ube. | Clicks on Ube. Amount paid: P385.0 | True | True | P |
|  | 2 | Designed for RegularVM. Checks if the payment to the user is successful or not when buying Leche Flan with not enough money. | Clicks on Leche Flan.  Amount paid: P200.0 | False | False | P |
| handlePayment() | 1 | Designed for SpecialVM. Checks if the payment to the user is successful or not when buying Condensed Milk. | Clicks on Condensed Milk.  Amount Paid: P60.0 | True | True | P |
|  | 2 | Designed for SpecialVM. Checks if the payment to the user is successful or not when buying Halo-Halo. | Clicks on Halo-Halo.  Ube: 2  Banana: 3  Macapuno: 1  Condensed Milk: 1  Leche Flan: 1  Sugar: 2  Ice: 3  Nata De Coco: 1  Price of Halo-Halo: P1801.0  Amount Paid: P1500 | False | False | P |

# MoneyDenomination

| **Method** | **#** | **Test Description** | **Sample Input Data** | **Expected Output** | **Actual Output** | **P/F** |
| --- | --- | --- | --- | --- | --- | --- |
| hasDenominations() | 1 | Determines if the change has enough denominations | 200 | false | false | P |
|  | 2 | Determines if the change has enough denominations | 1000 | false | false | P |
|  | 3 | Determines if the change has enough denominations | 0 | true | true | P |
| giveChange() | 1 | Gives the change in different denominations after buying a macapuno | Enter the amount paid: **60** | Give 2 of 1 peso denomination  Give 0 of 0 peso denomination | Give 2 of 1 peso denomination  Give 0 of 0 peso denomination | P |
|  | 2 | Gives 0 changes if the user enters the exact payment as the item price | Enter the amount paid: **5** | Give 0 of 0 peso denomination | Give 0 of 0 peso denomination | P |
| replenish() | 1 | Replenish the money denominations | Money denominations replenished. | Money denominations replenished. | Money denominations replenished. | P |

# Product

| **Method** | **#** | **Test Description** | **Sample Input Data** | **Expected Output** | **Actual Output** | **P/F** |
| --- | --- | --- | --- | --- | --- | --- |
| computeCalories() | 1 | Computes the total calories when the user bought Halo-halo | Clicks on Halo-Halo  Ube: 1  Banana: 1  Macapuno: 1  Condensed Milk: 1  Leche Flan: 1  Sugar: 1  Ice: 1  Nata De Coco: 1 | Total Calories of Halo-Halo: 1000 | Total Calories of Halo-Halo: 1000 | P |
| computePrice() | 1 | Computes the total price when the user bought Halo-Halo | Clicks on Halo-Halo  Ube: 1  Banana: 1  Macapuno: 1  Condensed Milk: 1  Leche Flan: 1  Sugar: 1  Ice: 1  Nata De Coco: 1 | Price of Halo-Halo: P1067.0 | Price of Halo-Halo: P1067.0 | P |
| setQuantityPerItem() | 1 | Setting the Quantity of each item | Banana: 2  Condensed Milk: 2  Leche Flan: 2  Ice: 2 | Banana: 2  Condensed Milk: 2  Leche Flan: 2  Ice: 2 | Banana: 2  Condensed Milk: 2  Leche Flan: 2  Ice: 2 | P |
| getItems() | 1 | Getting the Items for the product | Ube  Banana  Macapuno  Condensed Milk  Leche Flan  Sugar  Ice  Nata De Coco | Ube  Banana  Macapuno  Condensed Milk  Leche Flan  Sugar  Ice  Nata De Coco | Ube  Banana  Macapuno  Condensed Milk  Leche Flan  Sugar  Ice  Nata De Coco | P |
| getQuantityPerItem() | 1 | Getting the Quantity of each item | Ube: 1  Banana: 1  Macapuno: 1  Condensed Milk: 1  Leche Flan: 1  Sugar: 1  Ice: 1  Nata De Coco: 1 | Ube: 1  Banana: 1  Macapuno: 1  Condensed Milk: 1  Leche Flan: 1  Sugar: 1  Ice: 1  Nata De Coco: 1 | Ube: 1  Banana: 1  Macapuno: 1  Condensed Milk: 1  Leche Flan: 1  Sugar: 1  Ice: 1  Nata De Coco: 1 | P |
| getProductName() | 1 | Getting the name of the product | Creamy White Halo-Halo | Creamy White Halo-Halo | Creamy White Halo-Halo | P |

# Items

| **Method** | **#** | **Test Description** | **Sample Input Data** | **Expected Output** | **Actual Output** | **P/F** |
| --- | --- | --- | --- | --- | --- | --- |
| getItemName() | 1 | Getting the name of the item | Ube | Ube | Ube | P |
| setItemName() | 1 | Setting the name of the item | itemName = Ube  setItemName(“Leche Flan”); | Leche Flan | Leche Flan | P |
| getItemPrice() | 1 | Getting the price of the item with decimal | itemPrice = 25.45 | 25.45 | 25.45 | P |
|  | 2 | Getting the price of the item without decimal | itemPrice = 50 | 50.0 | 50.0 | P |
| getItemQuantity() | 1 | Getting the number of stocks of the item | itemQuantity = 2 | 2 | 2 | P |
| getItemCalories | 1 | Getting the amount of calories | itemCalories = 100 | 100 | 100 | P |
| setItemCalories() | 1 | Setting the amount of calories | itemCalories = 100 setitemCalories(500); | 500 | 500 | P |
| decreaseStockQuantity() | 1 | Decrements the Stock Quantity in the Vending Machine and increments the items sold. | itemQuantity = 2  decreaseStockQuantity(); | Item Quantity = 1  Item Sold = 1 | Item Quantity = 1  Item Sold = 1 | P |
|  | 2 | The method will not decrement the stock quantity and will not increment the items sold if it reaches 0. | itemQuantity = 0  decreaseStockQuantity(); | Item Quantity = 0  Item Sold = 0 | Item Quantity = 0  Item Sold = 0 | P |
|  | 3 | The Stock Quantity will be 0 and the Items Sold will not change if the Stock Quantity is a negative number | itemQuantity = -1  decreaseStockQuantity(); | Item Quantity = 0  Item Sold = 0 | Item Quantity = 0  Item Sold = 0 | P |
| restock() | This is similar to the restock() method in MaintenanceVM | | | | | |
| getItemSold() | 1 | Getting the total amount of items sold | itemSold = 0 | 0 | 0 | P |
| setItemSold() | 1 | Setting the total amount of items sold | itemSold = 0  setItemSold(2); | 2 | 2 | P |

Note

* VendingMachineApp class only has one method, the main method, and does not need further testing.
* In VendingMachineGUI, RegularVMGUI, and SpecialVMGUI: exitProgram() was not tested because it will be called upon by the run() method and does not need any user input.
  + A similar case to MaintenanceVMGUI which uses the goBack() method
* MachineGUI is an interface, thus it does not need to be tested.
* CreateVM does not need to be tested because it is a parent class that contains the methods necessary for SpecialVM and RegularVM to work. Thus, the methods here will be tested on the child classes instead.
* Some classes have some methods that do not require further testing, especially when they have been tested before in MCO1.