Unit Tests

Test Case: UnitTest 1
Test Name: Payment readBarCode() Unit Test
Description: The function readBarCode() directly works with a barcode scanner, which displays a beam of light across a barcode and measures the amount of light and the pattern of light reflected back. This reflected light is then converted into data by the function through decoding, and the data is used to efficiently read in the item's unique barcode ID. This function utilizes the Universal Product Code (UPC), which is the standard barcode symbology for multiple countries. The UPC consists of 12 digits, with one check digit, and 11 data digits. This unit test seeks to test if the method properly reads in the expected digits.
Steps: The user would either input the barcode ID manually, or use the BarCode scanner to input the barcode ID into the function. This results in readBarCode(554149166525) being called, which should return the item ID (554149166525).
Input: 554149166525 -> readBarCode(554149166525)
Expected Output: 554149166525
Actual Output: 554149166525
Pass/Fail: Pass

Test Case: UnitTest 2
Test Name: Payment readBarCode() Unit Test
Description: The function readBarCode() directly works with a barcode scanner, which displays a beam of light across a barcode and measures the amount of light and the pattern of light reflected back. This reflected light is then converted into data by the function through decoding, and the data is used to efficiently read in the item's unique barcode ID. This function utilizes the Universal Product Code (UPC), which is the standard barcode symbology for multiple countries. The UPC consists of 12 digits, with one check digit, and 11 data digits. This unit test seeks to test exception handling in the case of a 13 digit barcode ID.
Steps: The user would either input the barcode ID manually, or use the BarCode scanner to input the barcode ID into the function. In the case of a barcode ID != 12, the method would throw an exception that would output "Error: Maximum digits are 12." for a barcodeID > 12, and "Error: Minimum digits are 12." for a barcodeID < 12.
Input: 1228411015533
Expected Output: Error: Maximum digits are 12.
Actual Output: Error: Maximum digits are 12.
Pass/Fail: Fail

Test Case: UnitTest 3
Test Name: SalesNumbers setSalesIdNumber() Unit Test
Description: The setSalesIdNumber() function seeks to pair the sale analytics of a store to a

unique ID searchable throughout the system by an administrative user. That is, if a store makes a quantity of sales in a day, it will be paired with a unique sales ID number that's searchable within the store's system. This unique sales ID will be 9 numbers long. A sales ID less than or greater than 9 numbers will result in an exception being thrown.
Input: storeID.setSalesIDNumber(736369041)
Expected Output: 736369041
Actual Output: 736369041
Pass/Fail: Pass

Input: storeID.setSalesIDNumber(02117348)
Expected Output: 02117348
Actual Output: Error: Unique Sale ID requires 9 numbers.
Pass/Fail: Fail