**TEST CASES:**

**TEST CASE 1: BASELINE TEST:**

Basic functionality test:

*Description:* This tests the program of basic functionality by using a standard, normal inventory and clientsrequests files.

*Justification:* My reasoning of behind test was to use a conventional test of the program with my own inventory and client request file to see if the program can behave as intended under normal circumstances.

inventory.txt:

Mountain Bike, Model 472d, $300, $800, green, 4, 20-56, Beginner, 19

Mountain Bike, Model 472d, $300, $800, blue, 6, 12-19, Beginner, 19

City Bike, Model C123, $400, $1000, orange, 7, 15-85, 2, Dutch

clientsrequests.txt:

Mountain Bike, Model 472d, green, 1

Road Bike, Model 472d, red, 7

Mountain Bike, Model 3c07, blue, 7

EXPECTED:

Updated Inventory:

Mountain Bike, Model 472d, $300, $800, green, 3, 20-56, Beginner, 19

[OUT OF STOCK]

Mountain Bike, Model 472d, $300, $800, blue, 0, 20-56, Beginner, 19

City Bike, Model C123, $400, $1000, orange, 7, 15-85, 2, Dutch

Missing:

Mountain Bike, Model 472d, blue, 1

Road Bike, Model 472d, red, 7

Profit: $500.00

OUTCOME:

Updated Inventory:

Mountain Bike, Model 472d, $300, $800, green, 3, 20-56, Beginner, 19

[OUT OF STOCK]

Mountain Bike, Model 472d, $300, $800, blue, 0, 20-56, Beginner, 19

City Bike, Model C123, $400, $1000, orange, 7, 15-85, 2, Dutch

Missing:

Mountain Bike, Model 472d, blue, 1

Road Bike, Model 472d, red, 7

Profit: $500.00

**TEST CASE 2: EDGE TEST:**

Blank lines test:

*Description:* This tests out the program by adding a blank line in the inventory file.

*Justification:* This test was created to see if the program can be able to detected and go over blank lines in the text file. Whether it will output an error or skip the blank line. It should ignore the blank line.

inventory.txt:

Mountain Bike, Model 472d, $300, $800, green, 4, 20-56, Beginner, 19

Mountain Bike, Model 472d, $300, $800, blue, 6, 12-19, Beginner, 19

City Bike, Model C123, $400, $1000, orange, 7, 15-85, 2, Dutch

clientsrequests.txt:

Mountain Bike, Model 472d, green, 1

Road Bike, Model 472d, red, 7

Mountain Bike, Model 3c07, blue, 7

EXPECTED:

Updated Inventory:

Mountain Bike, Model 472d, $300, $800, green, 3, 20-56, Beginner, 19

Mountain Bike, Model 472d, $300, $800, blue, 6, 12-19, Beginner, 19

City Bike, Model C123, $400, $1000, orange, 7, 15-85, 2, Dutch

Missing:

Road Bike, Model 472d, red, 7

Mountain Bike, Model 3c07, blue, 7

Profit: $500.00

OUTCOME:

Updated Inventory:

Mountain Bike, Model 472d, $300, $800, green, 3, 20-56, Beginner, 19

Mountain Bike, Model 472d, $300, $800, blue, 6, 12-19, Beginner, 19

City Bike, Model C123, $400, $1000, orange, 7, 15-85, 2, Dutch

Missing:

Road Bike, Model 472d, red, 7

Mountain Bike, Model 3c07, blue, 7

Profit: $500.00

**TEST CASE 3: EDGE TEST:**

Missing attributes:

*Description:* This tests the program with an empty attribute in the color section of the text file.

*Justification:* I did this test to see if the program can detect or handle a missing attribute. Will it to display an error or ignore the incomplete bike entry? It should ignore it since it is not the client’s intended request.

inventory.txt:

Mountain Bike, Model 472d, $300, $800, , 4, 20-56, Beginner, 19

Mountain Bike, Model 472d, $300, $800, blue, 6, 12-19, Beginner, 19

City Bike, Model C123, $400, $1000, orange, 7, 15-85, 2, Dutch

clientsrequest.txt:

Mountain Bike, Model 472d, green, 1

Road Bike, Model 472d, red, 7

Mountain Bike, Model 3c07, blue, 7

EXPECTED:

Updated Inventory:

Mountain Bike, Model 472d, $300, $800, , 4, 20-56, Beginner, 19

Mountain Bike, Model 472d, $300, $800, blue, 6, 12-19, Beginner, 19

City Bike, Model C123, $400, $1000, orange, 7, 15-85, 2, Dutch

Missing:

Mountain Bike, Model 472d, green, 1

Road Bike, Model 472d, red, 7

Mountain Bike, Model 3c07, blue, 7

Profit: $0.00

OUTCOME:

Updated Inventory:

Mountain Bike, Model 472d, $300, $800, , 4, 20-56, Beginner, 19

Mountain Bike, Model 472d, $300, $800, blue, 6, 12-19, Beginner, 19

City Bike, Model C123, $400, $1000, orange, 7, 15-85, 2, Dutch

Missing:

Mountain Bike, Model 472d, green, 1

Road Bike, Model 472d, red, 7

Mountain Bike, Model 3c07, blue, 7

Profit: $0.00

**TEST CASE 4:**

Negative double values:

Description: This tests out the program with a negative value in purchase price section.

Justification: I did this as my own test to see if the program can run and display the proper value if the number is negative. Will it give an error or calculate the value normally? It should calculate the value normally.

inventory.txt:

Mountain Bike, Model 472d, $-300, $800, green , 4, 20-56, Beginner, 19

Mountain Bike, Model 472d, $300, $800, blue, 6, 12-19, Beginner, 19

City Bike, Model C123, $400, $1000, orange, 7, 15-85, 2, Dutch

clientsrequest.txt:

Mountain Bike, Model 472d, green, 1

Road Bike, Model 472d, red, 7

Mountain Bike, Model 3c07, blue, 7

EXPECTED:

Updated Inventory:

Mountain Bike, Model 472d, $-300, $800, green, 3, 20-56, Beginner, 19

Mountain Bike, Model 472d, $300, $800, blue, 6, 12-19, Beginner, 19

City Bike, Model C123, $400, $1000, orange, 7, 15-85, 2, Dutch

Missing:

Road Bike, Model 472d, red, 7

Mountain Bike, Model 3c07, blue, 7

Profit: $1100

OUTCOME:

Updated Inventory:

Mountain Bike, Model 472d, $-300, $800, green, 3, 20-56, Beginner, 19

Mountain Bike, Model 472d, $300, $800, blue, 6, 12-19, Beginner, 19

City Bike, Model C123, $400, $1000, orange, 7, 15-85, 2, Dutch

Missing:

Road Bike, Model 472d, red, 7

Mountain Bike, Model 3c07, blue, 7

Profit: $1100