# CMIS242 Project 2 Test Cases

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## Goal

The goal of my test cases was to cover the typical use cases of the Automobile Sales Tax Calculator as well as see if it could handle empty fields and invalid inputs gracefully.

## Test Cases

### Test Case 1 – Calculate Sales Tax for Hybrid Car

This test case input the following information into the calculator:

Make and Model: Honda Insight

Price: 22930

MPG: 55

The expected output for the sales tax was $1016.50.

### Test Case 2 – Calculate Sales Tax for Electric Car

This test case input the following information into the calculator:

Makes and Model: Hyundai Ioniq EV

Price: 33000

Weight: 3371

The expected output for the sales tax was $1500.

### Test Case 3 – Calculate Sales Tax for Other Car

This test case input the following information into the calculator:

Make and Model: Subaru WRX

Price: 27495

The expected output for the sales tax was $1374.75.

### Test Case 4 – Display Report with 3 Cars.

This test case input the cars listed in test cases 1-3 into the calculator and hit display report. The expected output was:

Automobile Sales Tax History

Make And Model: Honda Insight

MPG: 55

Price: $22930

Sales Tax: $1016.50

Make and Model: Hyundai Ioniq EV

Weight: 3371

Price: $33000

Sales Tax: $1500.00

Make and Model: Subaru WRX

Price: $27495

Sales Tax: $1374.75

Invalid or no entry.

Invalid or no entry.

### Test Case 5 – Display Report After Looking Up 6 Cars

This test case input the cars from test cases 1-3 into the calculator as well as 3 more cars with Make and Model: Test Case 4-6, and Price: 4000, 5000, and 6000 respectively. Display report’s expected output was:

Automobile Sales Tax History

Make and Model: Hyundai Ioniq EV

Weight: 3371

Price: $33000

Sales Tax: $1500.00

Make and Model: Subaru WRX

Price: $27495

Sales Tax: $1374.75

Make and Model: Test Case 4

Price: $4000

Sales Tax: $200.00

Make and Model: Test Case 5

Price: $5000

Sales Tax: $250.00

Make and Model: Test Case 6

Price: $6000

Sales Tax: $300.00

### Test Case 6 – Empty Fields

This test case was to verify having empty fields would generate a pop-up error. The expected output of having empty fields is the pop-up error “Invalid input type or not all fields completed”.

### Test Case 7 – Invalid Inputs

This test case was to verify putting in strings into the int fields would generate a pop-up error. The expected output of having empty fields is the pop-up error “Invalid input type or not all fields completed”.

### Test Case 8 – Clear Fields

This test case was to verify that clicking clear fields would clear all text fields. The expected output for clicking the button is nothing but all text fields would be cleared.

## Results

The test cases results are listed below.

