**Test Case 01**

Insert ‘a’ for the first input

Observation: Calculator displayed "Invalid input. Please enter a valid number." and asked for the first number again.

**Test Case 02**

Insert ‘#’ for the second input

Observation: Calculator displayed "Invalid input. Please enter a valid number." and asked for the second number again.

**Test Case 03**

Input: First number = 1, Second number = 2, Operation = 1 (Addition)

Observation: Calculator displayed "Result: 1.0 + 2.0 = 3.0" correctly.

**Test Case 04**

Input: After calculation, input for repeat = y

Observation: Calculator displayed "Invalid input. Please type 'yes' or 'no'." and asked again.

**Test Case 05**

Input: After calculation, input for repeat = yes

Observation: Calculator displayed "Enter the first number:" again.

**Test Case 06**

Input: First number = 2, Second number = 3, Operation = 2 (Subtraction)

Observation: Calculator displayed "Result: 2.0 - 3.0 = -1.0" correctly.

**Test Case 07**

Input: First number = 4, Second number = 5, Operation = 3 (Multiplication)

Observation: Calculator displayed "Result: 4.0 \* 5.0 = 20.0" correctly.

**Test Case 08**

Input: First number = 4, Second number = 8, Operation = 4 (Division)

Observation: Calculator displayed "Result: 4.0 / 8.0 = 0.5" correctly.

**Test Case 09**

Input: After calculation, input for repeat = no

Observation: Calculator displayed "Goodbye!" and terminated correctly.