In this task, I discovered four bugs in the code. The first bug in the code was located in the returnChange() function. The previous return change function did not allow the program to check for the precondition. I added an If statement that allowed the code to check if the balance is less than or equal to zero and then returns the balance as change.

The next bug was discovered in the makePurchase() function, which did not allow the program to handle an invalid code. I fixed this bug by adding an “if-else” statement that allowed the program to check the validity of the inputted string or generate an error message if the code was invalid.

The next bug was discovered in the VendingMachineItem() function, which did not allow the program to handle an invalid input efficiently. I fixed this bug by adding an “if-else” statement that allowed the program to check if there was an instance of validity or else it would throw and error message.

The final bug was discovered in the addItem() function, which did not allow the program to handle an invalid input as well. I added an “if-else” statement that allowed the program to check if there was an instance of validity and throw an error message if the program discovered an invalid input.