Second Chance Assignment

For the second chance assignment, I decided to update my finite state machine code. I wanted to address the problem of the user never getting their money back if they had entered more money into the machine than the price of the item that they wanted to buy. To do this, I created a new input called EXCESS. If the user has excess money after receiving their item, they will be able to enter this input into the vending machine.

In a real vending machine, the machine will transition from vending and outputting the desired item to being idle again and outputting the excess money seamlessly. Since this program only uses text to display the state and output, I used a button to get the user’s consent to transition to the next output instead. I could have used a timer as well, but I was worried about users missing one of the outputs if they looked away.

What I learned from this assignment was that states and outputs in a state machine can be more complicated than they first appear. Additionally, I confirmed that the way that I was setting and getting values was convenient. I barely had to change any code for initializing the dictionary, and didn’t have to change anything for the way that I was setting the current input.