Lab Report 5

# Problem

We are asked to make a vending machine that will take in values from 25 to 100 in intervals of 5. Then the program is supposed to calculate how much change in coins if left after the purchase since the user can only use a dollar to buy a snack.

# Proposed Solution

Start

Ask the user for a price

Is the price between 25 and 100 and divisible by 5?

Yes?

Print the price

No?

Stop the program

End

Calculate and print the amount of change in exact coins

# Tests and Results

I tested the program with different numbers and got the correct calculations.

# Problems Encountered

The problem I encounters was converting the change into coins. However, I didn’t have a problem with syntax at all. I just had slight difficulty making the calculations.

# Conclusions and Discussion

Another way to solve this problem would be to have the calculations of the change be slightly different. However, it would be the same general idea.

# Additional Questions

1. Why is input validation necessary? Input validation prevents the user’s input from becoming an invalid response that would provide an incorrect or useless output.

2. Can a keyword be used as the name of an identifier? Why/Why not? No, because the program will mistake that for a task. If you were to name a variable “if” the program might get confused and try and complete an if statement.

3. In the proposed solution section, draw a flowchart to represent your solution.