Lab Report 8

# Problem

The task is to make a program that will ask the user for the number of books they have purchased this month. Then the program is supposed to use that value to calculate how many points the user has.

# Proposed Solution

Start

Ask the user for how many books they’ve purchased this month

Is the value >= 0?

Yes?

Compare the value with the cases:

0 = Display 0 points

1 = Display 5 points

2 = Display 15 points

3 = Display 30 points

4 or more = Display 60 points

No?

Exit the program

End

# Tests and Results

I’ve tested the program with all types of values, and it works fine.

# Problems Encountered

The only problem I had was trying to make the cases trigger for 4 or more. This was fixed by using a default case since most other numbers can’t be used here.

# Conclusions and Discussion

An additional way to solve this problem could be using if statements instead of switch statements.

# Additional Questions

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

2. Why is the keyword break used in a switch statement? What happens when “break” is omitted? If the keyword “break” is omitted, then the program will use all cases it is lesser than or equal to. For example, if the value entered is 3, then the program will check any cases with values less than or equal to 3.