Chocolate Factory Lab

For this lab you will be building a quality assurance system for a local chocolate factory. Your program will help guarantee that the chocolate coming off the assembly line meets the factory's quality standards. Based on the type of chocolate being checked, the following are considered quality values[1]:

White Chocolate:

Percent Cocoa Butter: >= 20%

Percent Milk Solids: > 14%,

Milk Chocolate:

Percent Cocoa Butter: >= 15%

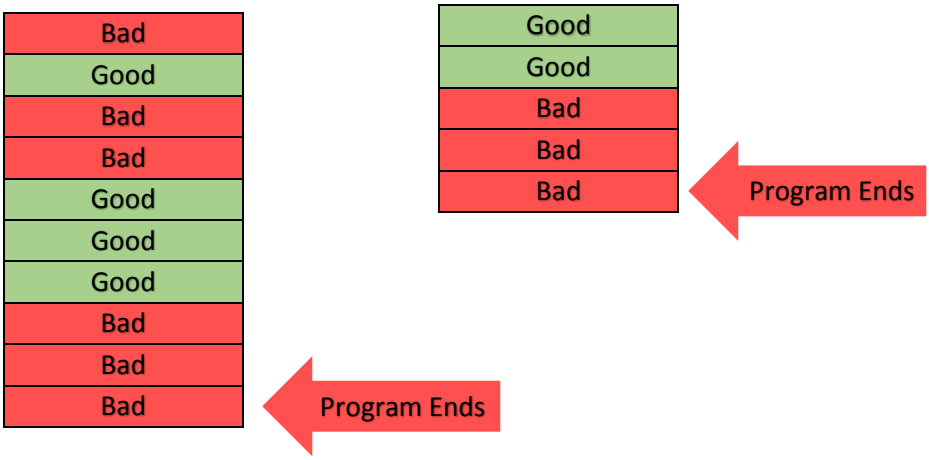
Percent Milk Solids: >= 12%,

Your program will check each piece of chocolate for quality by accepting from the user the type of chocolate being checked and the percent cocoa butter, cocoa liquor, and milk solids for the piece of chocolate. If the piece of chocolate matches the quality standards, the program will display: "Yum!", but for poor quality chocolate pieces the program will display "Yuck!".

[1] FDA Regulations on Chocolate:
https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfcfr/CFRSearch.cfm?CFRPart=163

Besides checking the individual pieces of chocolate for quality, the program has an emergency shutdown feature. If too many bad chocolates are found back-to-back, then there might be a problem with the assembly line. The program will prompt the user for a quality assurance count, QAC. If that many bad chocolates are found back-to-back, the program will display a warning message ("Emergency Shutdown Activated") and end the program. The system will only cause an emergency shutdown though if the number of poor chocolates are found in succession. If a few bad chocolates are found here and there, the program will not trigger a shutdown.

Example: QAC = 3



Example: QAC = 1