## Lab 5-Menus / Switch (Mark : 1%) Friday October 21, 2016 at 11.59 pm

1. Write a program to implement a menu that asks the user to select one of three choices to the user.

## MENU

- 1. Calculate parallel resistance.
- 2. Calculate the current flowing through a resistor.
- 3. Exit the program.

If the user selects 1, ask the user to enter the values of two resistors and then calculate and print the value of the two resistors and the parallel resistance.

If he selects 2, ask him to enter the value of a resistor and the voltage across it, and then calculate and print the current flowing through the resistor.

If he selects 3, print "Goodbye" and prompt the user with "Hit any key to exit" and exit after he does.

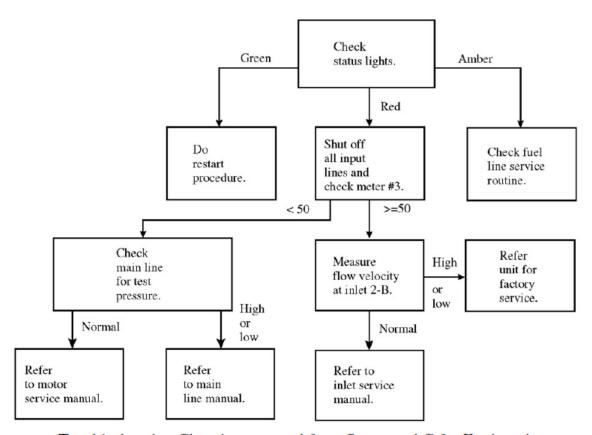
If the user selects anything other than 1, 2 or 3 print "Wrong selection". Ask the user to hit any key, print "Goodbye" and exit the program.

- 3. Rewrite Question 2 using a Switch.
- 4. Modify Question 3 using a, b and c as the user choices in the Switch.
- 5. Write a program to implement the automated diagnostic problem whose logic is shown on the next page.

## **Submission guidelines:**

1. Submit the .c files on Blackboard

Develop a program which will simulate computer aided troubleshooting of a hypothetical diesel engine. The troubleshooting chart is shown below:



(Troubleshooting Chart is excerpted from Structured C for Engineering and Technology, 4th Ed., by J. L. Antonakos and K. C. Mansfield Jr.)