Summit Singh Thakur st866@drexel.edu 17 February 2017 CS-171-C, Lab Section 065

Homework 3 Documentation

Program 1:

```
Enter your weight (in lbs): 150

How many minutes has it been since your last drink? 0

Enter your sex as M or F : F

150 pounds, female, 0 minutes since last drink
# drinks BAC Status

0 0.000 Safe To Drive

1 0.030 Some Impairment
2 0.060 Driving Skills Significantly Affected
3 0.090 Criminal Penalties in Most US States
4 0.120 Legally Intoxicated - Criminal Penalties in All US States
5 0.150 Legally Intoxicated - Criminal Penalties in All US States
6 0.180 Legally Intoxicated - Criminal Penalties in All US States
7 0.210 Legally Intoxicated - Criminal Penalties in All US States
8 0.240 Legally Intoxicated - Criminal Penalties in All US States
9 0.270 Legally Intoxicated - Criminal Penalties in All US States
10 0.300 Legally Intoxicated - Criminal Penalties in All US States
11 0.330 Death is Possible!

Press any key to continue . . .
```

User Manual

- This program asks user to enter his/her weight (in lbs).
- This program asks user to enter minutes since it has been his/her last drink.
- This program asks user to enter his/her gender (M or F).
- This program will give output of Blood Alcohol Concentration (BAC) model.
- This program will print number of drinks, BAC, and Status.

System Manual

• This program uses five different functions to give the desired output.

- This program uses computeBloodAlocholConcentration() function which returns via reference parameters both the male and female blood concentrations.
- This program uses impairment() function which returns appropriate message for the alcohol concentration.
- This program uses promptForInteger() function which prints out the message and gets in integer, if the integer is greater than or equal to lower and less than or equal to upper then it returns the integer otherwise, it loops, asking for an integer again.
- This program uses promptForMorF() function which prints out the message and returns value entered as its result. This function checks that the input character entered is an M or an F.
- This program uses showImpairmentChart() function which prints a BAC model for up to and including ten drinks and with nicely formatted output.