Test log

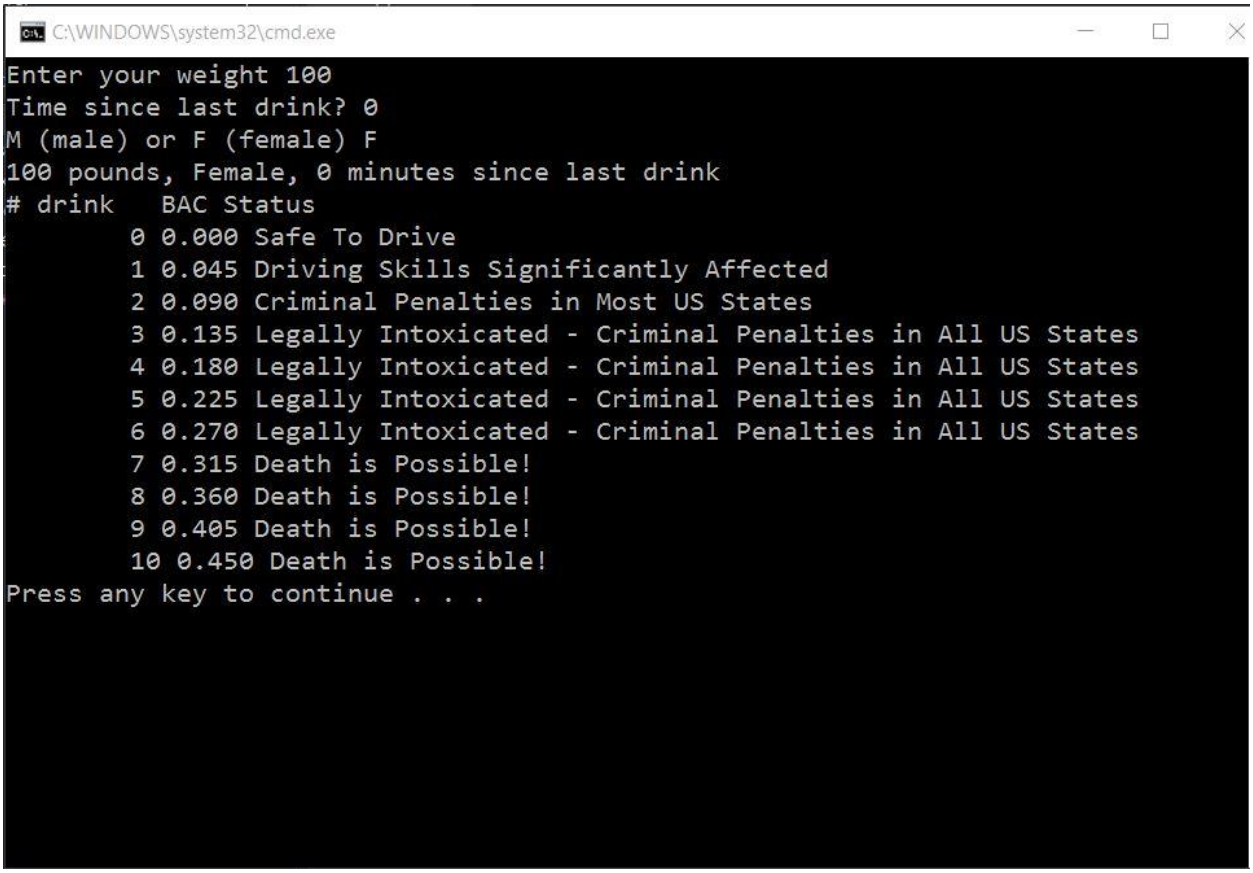
User Manuel

The user is prompted a message asking for weight. User must input a number between 50 and 500 pounds. Than the user will be prompted for the time in which they last drank. The user must enter a time between 0 and 1440 minutes. Finally the user will be prompted a message asking them if they are male or female. The user will have to input M or F. Than the data will be printed out. If anything is written outside of the parameters the program will stop running.

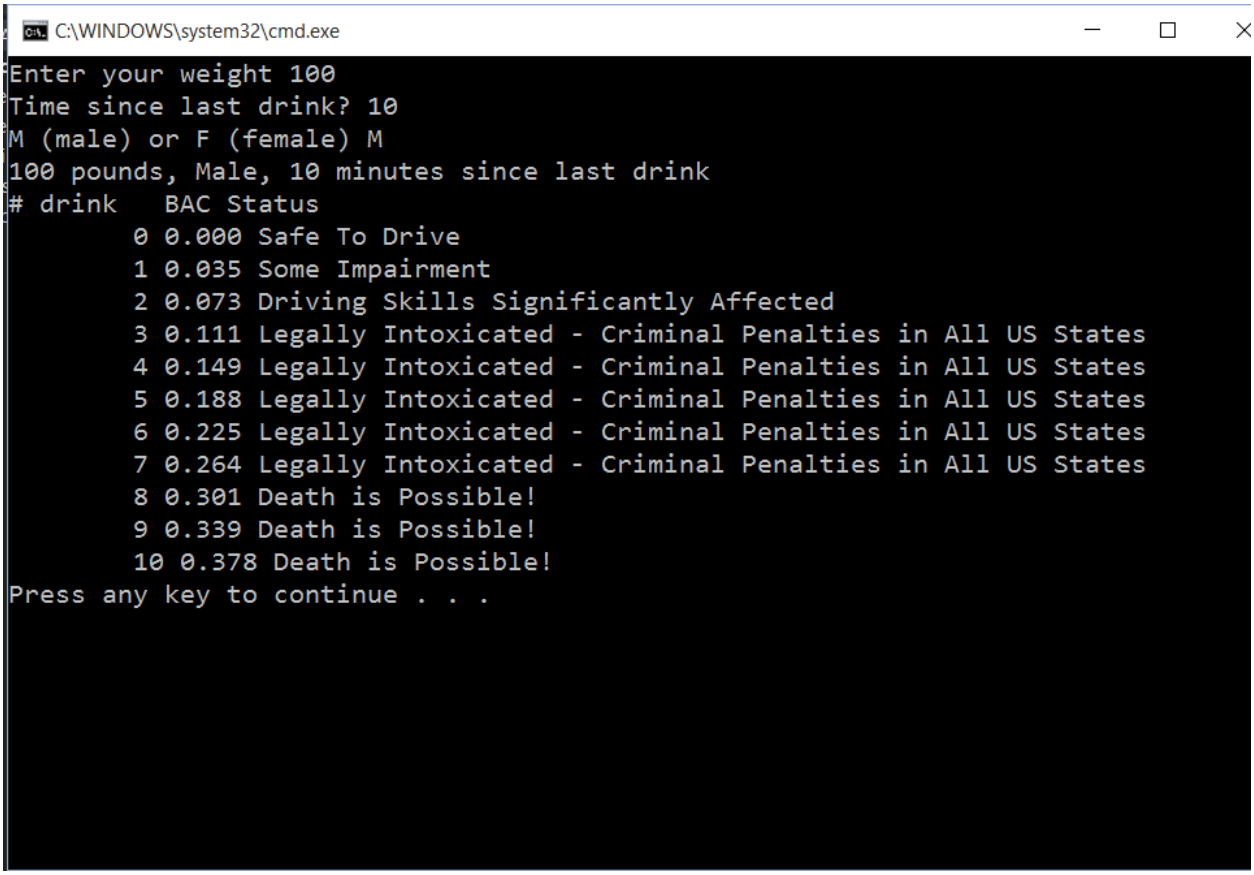
System Manuel

The first function contains the two equations for the femaleBAC and maleBAC. It takes the drinks divides it by the weight multiplied by the constant and subtracts it by the duration / 40 multiplied by .01. If the BAC is less than 0 than it makes it equal to 0. The second function matches up the messages with the amount of bac so the correct message is displayed with the right amount of bac. The third program has three function in it. The first function takes the integer entered and checks if it is within the parameters and then prints it back out if it is. If not it will print nothing out. Function 2 takes the morf which I defined as what the user inputs and it just prints it back out. Function 3 has a for loop which it takes the computeBloodAlcoholConcentration function and puts it after every time it lists the drinks which is from 0 to 10 drinks. It also takes the impairment function and displays the message after every drink. In the main function the promptForInteger function is called twice. Once for the weight and the duration. It prompts the user a question and parameters are defined in both of the functions. PromptForMorF function is called which displays the message asking male or female. After that is an if statement that is true if what the user enters is equal to isMale. Then the equation for calculating the male bac is used otherwise it will return false which it will make the function use the female equation for calculating the female bac. The string gender is used to display the word female or male instead of just m or f. The cout for displaying the information about what the user inputted is just below that. The last line calls the showImpairmentChart function which displays all the information about the bac and the message that goes with the bac. After that the program will stop and will close upon pressing any key.

Test log


C:\WINDOWS\system32\cmd.exe
Enter your weight 100
Time since last drink? 0
M (male) or F (female) F
100 pounds, Female, 0 minutes since last drink
drink BAC Status
0 0.000 Safe To Drive
1 0.045 Driving Skills Significantly Affected
2 0.090 Criminal Penalties in Most US States
3 0.135 Legally Intoxicated - Criminal Penalties in All US States
4 0.180 Legally Intoxicated - Criminal Penalties in All US States
5 0.225 Legally Intoxicated - Criminal Penalties in All US States
6 0.270 Legally Intoxicated - Criminal Penalties in All US States
7 0.315 Death is Possible!
8 0.360 Death is Possible!
9 0.405 Death is Possible!
10 0.450 Death is Possible!
Press any key to continue . . .

Test log


C:\WINDOWS\system32\cmd.exe
Enter your weight 100
Time since last drink? 10
M (male) or F (female) M
100 pounds, Male, 10 minutes since last drink
drink BAC Status
0 0.000 Safe To Drive
1 0.035 Some Impairment
2 0.073 Driving Skills Significantly Affected
3 0.111 Legally Intoxicated - Criminal Penalties in All US States
4 0.149 Legally Intoxicated - Criminal Penalties in All US States
5 0.188 Legally Intoxicated - Criminal Penalties in All US States
6 0.225 Legally Intoxicated - Criminal Penalties in All US States
7 0.264 Legally Intoxicated - Criminal Penalties in All US States
8 0.301 Death is Possible!
9 0.339 Death is Possible!
10 0.378 Death is Possible!
Press any key to continue . . .