CS130 Sections B and C Final Project

Simple Circuit Simulator

Due: December 8, 2017 midnight

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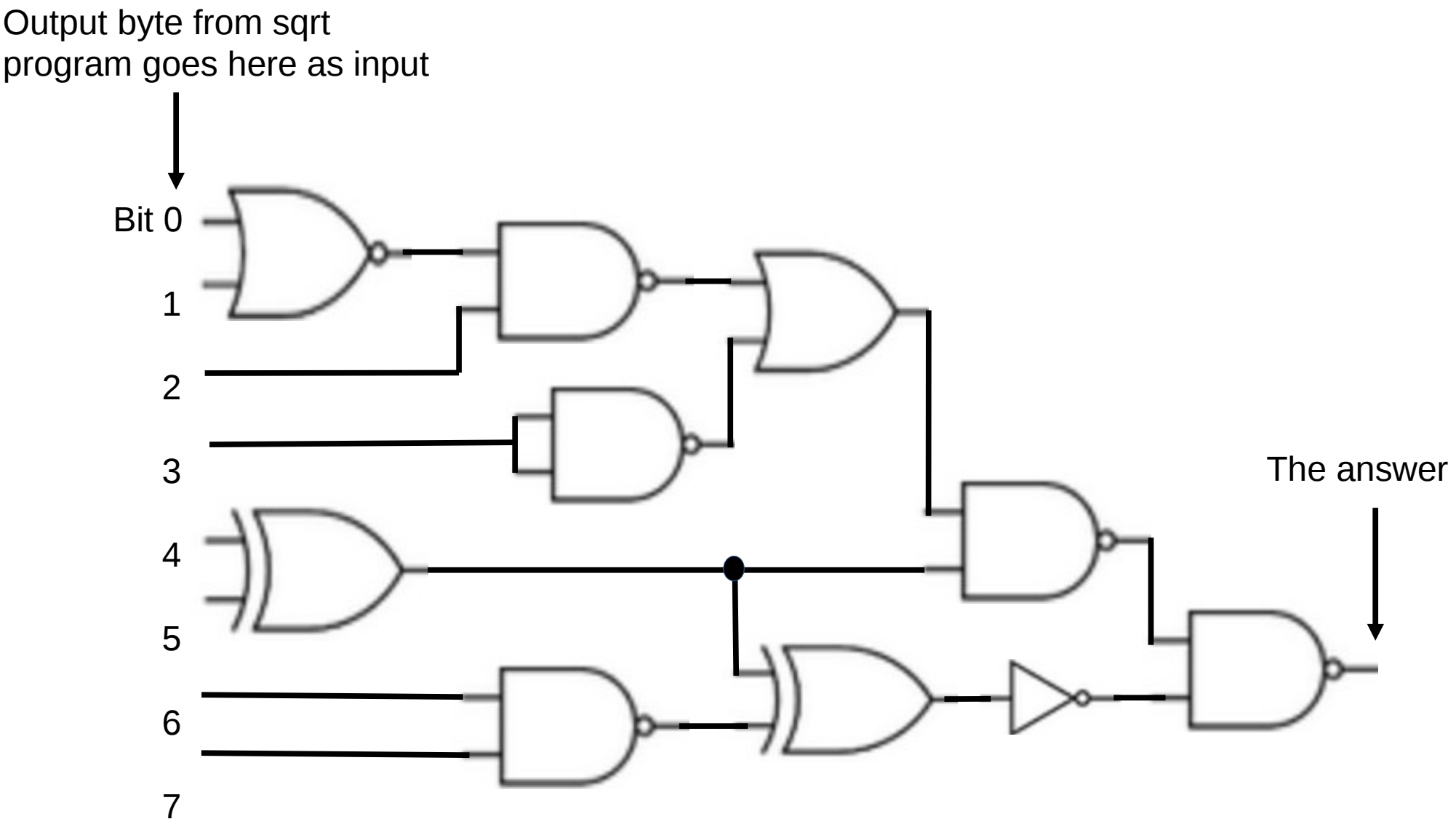
1) Take **your** student ID's last three digits, assume they are in hexadecimal. This will be used as an input into step (2). Thus, 123...726 would be 726H.

2) Write or find on the internet a full 8086 program that takes the square root of your unique number from step (1) above. You want the whole byte number result, not any fractional data.

3) The resulting sqrt whole number will be used as input into the combination logic schematic on the next page whose simulation you will write in 8086 assembly language. You should use the nand.asm I provided on moodle as a guide in writing the remaining logic gate code subroutines. You need to combine both the square root and combinational logic gate code into one program. You need to run the program in Turbo Assember to output an ASCII number to the screen and exit the program as was done with our other 8086/DOS programs. Your answer will be a single bit: 0 or 1.

You need to send me the **commented source code** and a screen shot of the data being entered into the sqrt and the simulation output. I will set moodle to allow two files to be uploaded.


Output byte from sqrt
program goes here as input
Bit 0
1
2
3
4
5
6
7
The answer