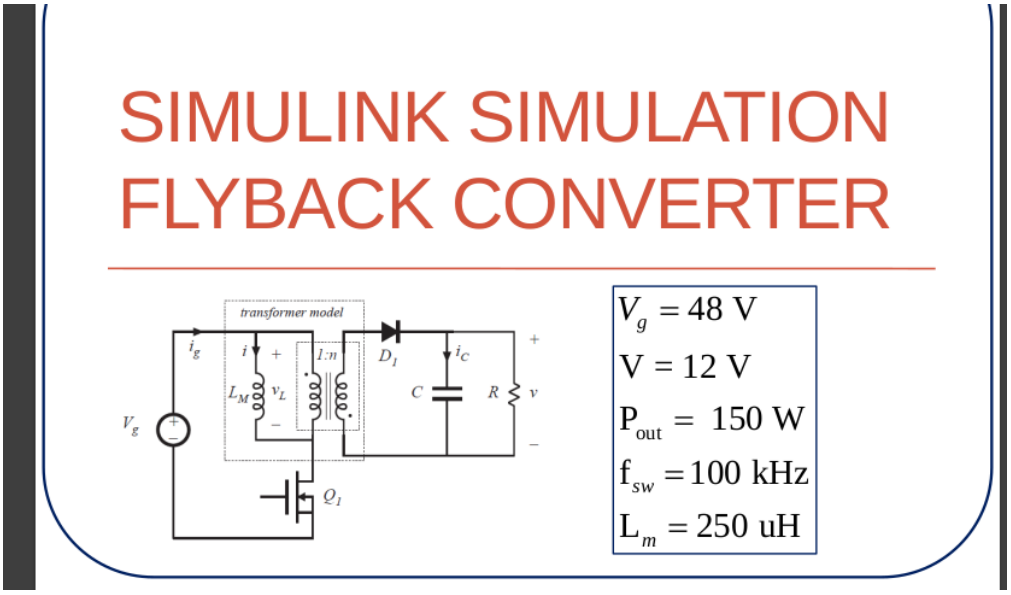
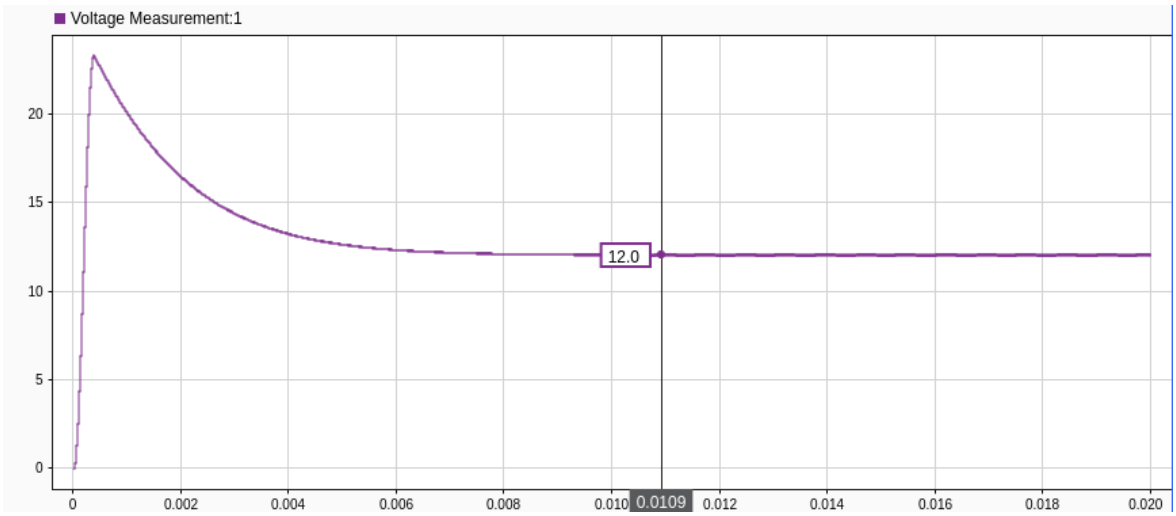
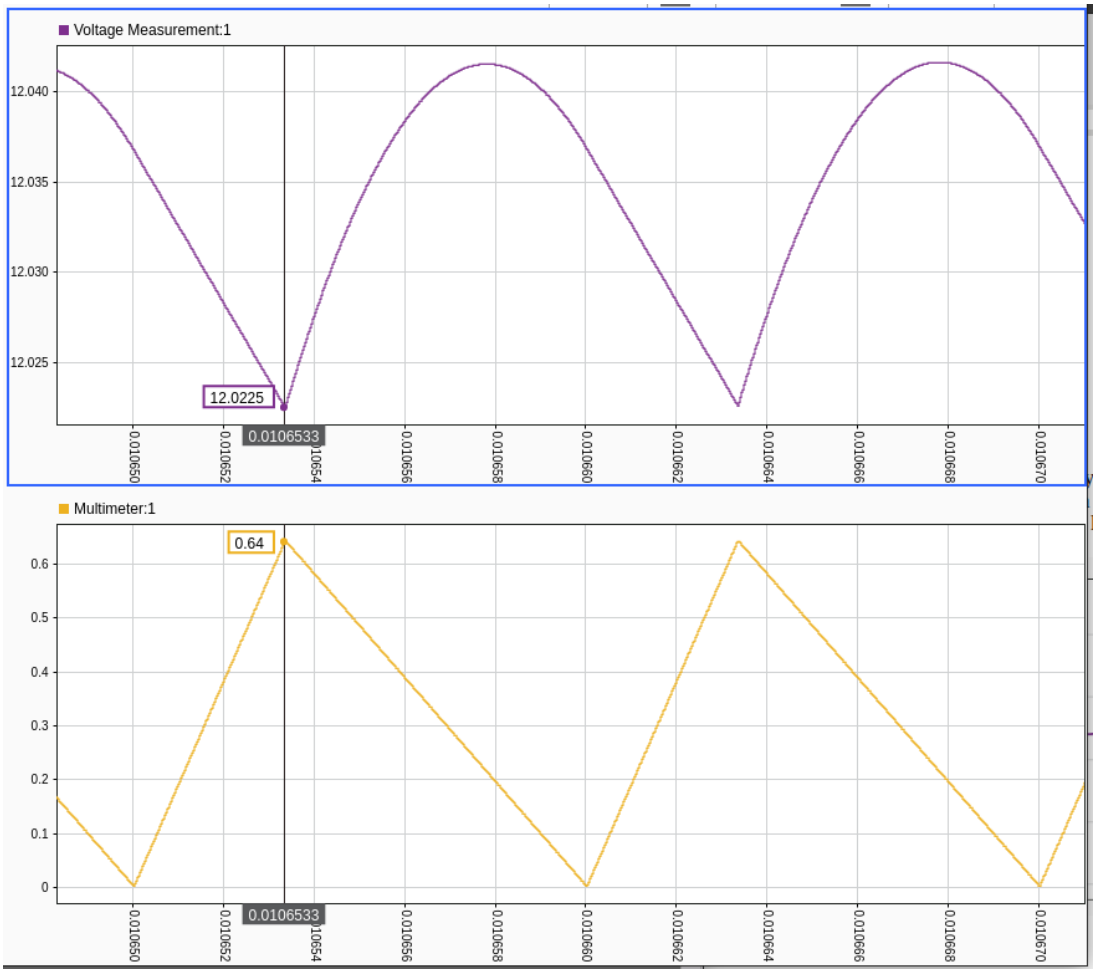
Module 4 Partial Credit:

For questions 5 and 6, I continued to use the turns ratio from the book figure, as it wasn't clear to me to use the 0.5 from the lecture video. I just changed the parameters that were listed in this slide:



This led to my "incorrect" calculation of the critical resistance for question 5, and will impact my output plots for question 6. I believe my math checks out, as the plot I submitted indicates. If you look, the magnetizing current is just at zero at the end of the switching period, on the brink of DCM. If I update my .m file with an n of 0.5, my R becomes 28.125 as shown in the solution, and my output plot looks more like this:


Voltage Measurement:1
20
15
10
5
0
12.0
0
0.002
0.004
0.006
0.008
0.010
0.0109
0.012
0.014
0.016
0.018
0.020


Voltage Measurement:1
12.040
12.035
12.030
12.025
12.0225
0.0106533
0.010650
0.010652
0.010654
0.010656
0.010658
0.010660
0.010662
0.010664
0.010666
0.010668
0.010670
Multimeter:1
0.64
0.6
0.5
0.4
0.3
0.2
0.1
0
0.0106533