SPICE PROJECT 1

The single phase bridge rectifier shown below is supplied directly from a 120V 60Hz source without any input transformer. The load resistance is RL=500Ω. Using SPICE, design an LC filter such that the rms ripple voltage Vr(rms) is within 5% of average output voltage Vo(av). Use internet to search for a diode that can do the job and find its SPICE model to use in your simulations.

You should hand in you spice files and a plot of Vo(t) showing that you have accomplished the design target.

