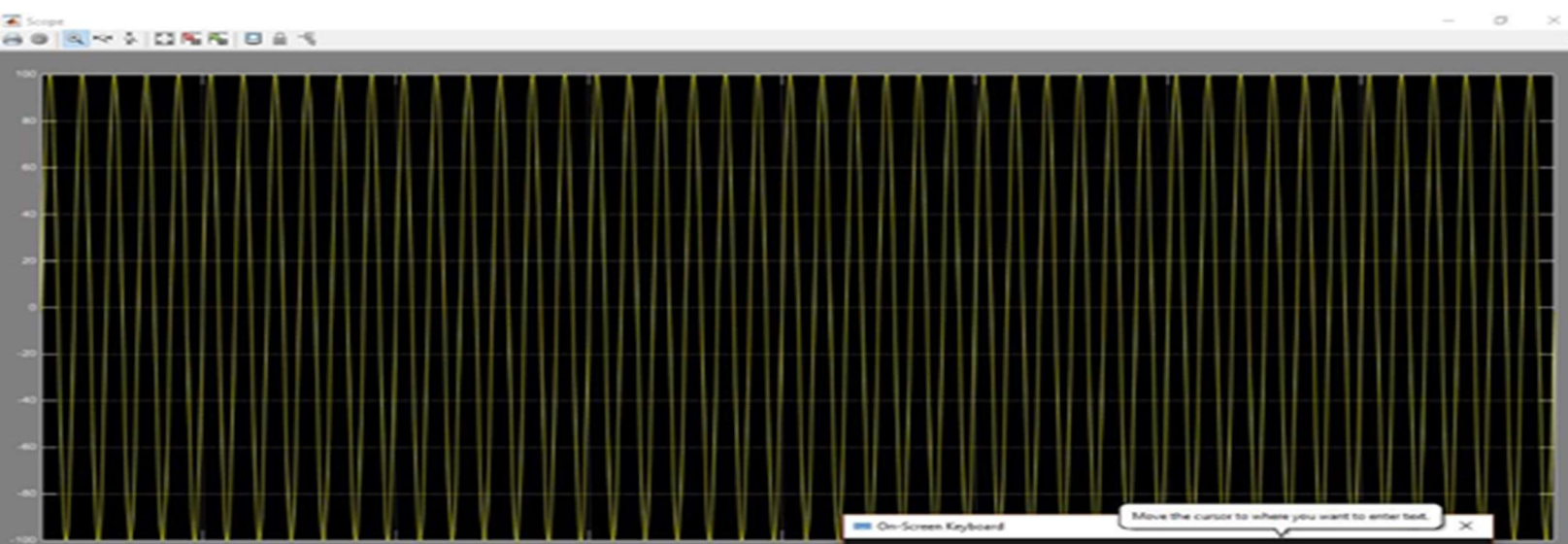
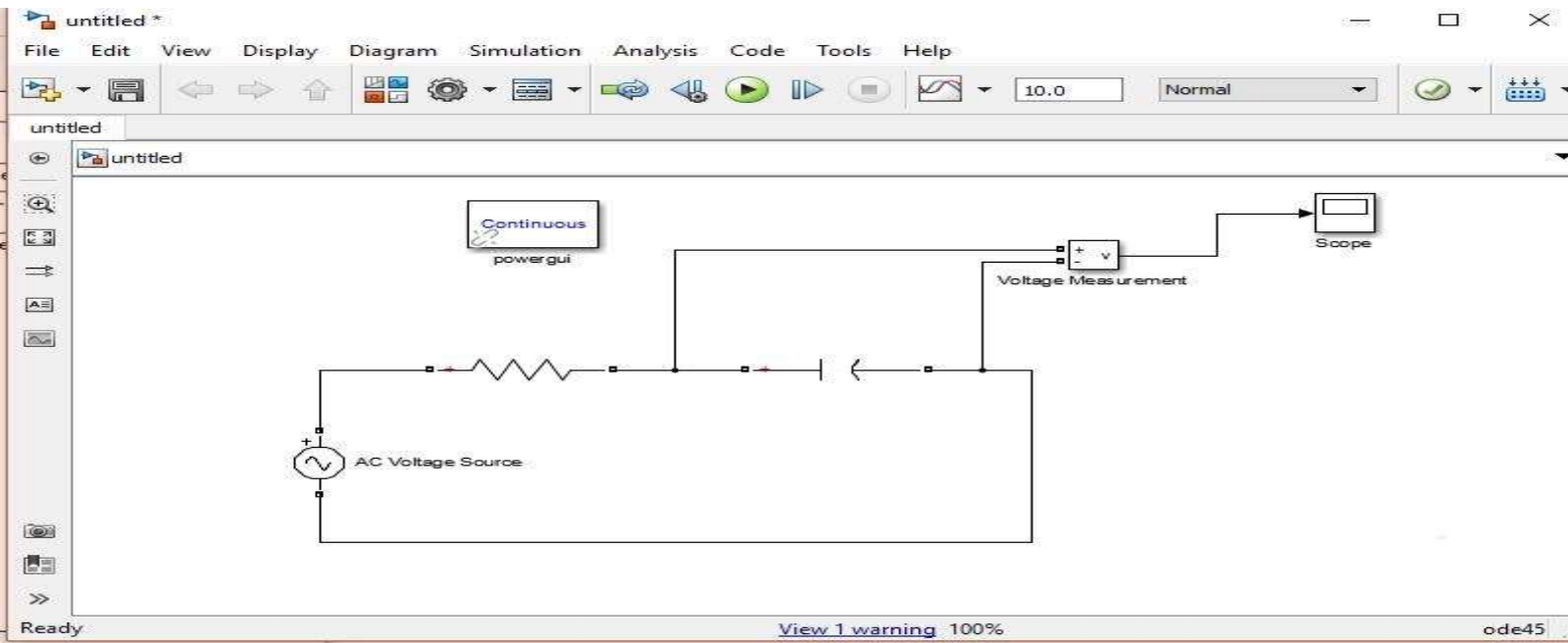
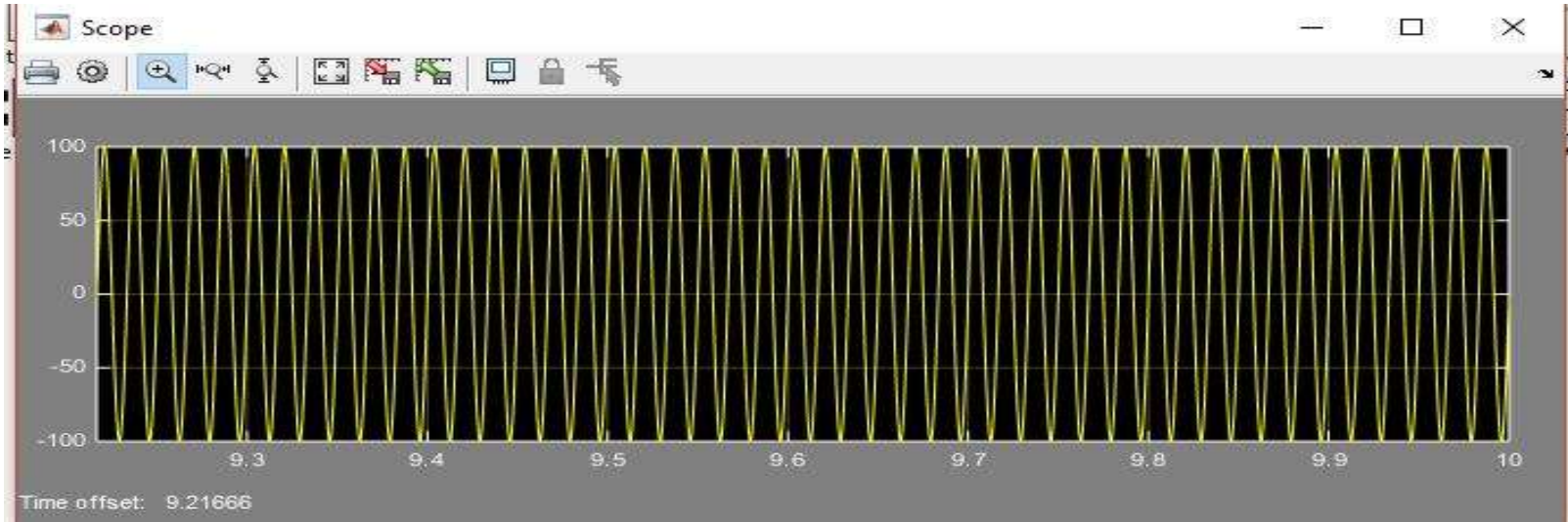


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17/ENG02/072  
COMPUTER ENGINEERING  
ENG342

- 1) Filters is a device or process that remove some unwanted component or features from a signal. The benefit of filters in engineering system is that it helps to remove unwanted features in engineering systems such as harmonics, electrical circuits etc. In order words, its makes the results of this systems to be more accurate and efficient.
- 2) The steps for the design
  - i) I used a basic Simulink to design a resistor capacitor filter.
  - ii) I created a new Simulink model and saved it.
  - iii) I searched for the AC voltage source, resistor, scope, capacitor addition block which I used to design the pass filter.
  - iv) I linked them using the lines appropriately.  
NB: the PowerGui is used with simulation of power systems and power electronics.





3) I observed that when I passed  $5\text{ K}\Omega$  and  $2\text{ K}\Omega$  through the filter, there was a change in the graph.

