Tips for Lab. 4

1. In both schematic templates, an external circuit is included for finding the next state of any present state. As an example, follow the three steps below to find the next state of the present state 3:
   (i) Hit the digit "3" on the hex keyboard and set the value of C to 0 or 1.
   (ii) Hit the RESET by clicking the left button of the mouse.
   (iii) Hit the clock by clicking the left button of the mouse. The values of the binary probes for $Q_2Q_1Q_0$ is the next state of the present state 3.

2. Only two IC's in each of the two templates are counted towards the number of IC's you can use. The maximum is 8 IC's. In other words, you may use 6 more.

3. It may happen that an excitation, especially the design using JK flip-flops, is a single literal or Logic 1 (0). Under such circumstances, replace the name of the excitation by the literal, 0, or 1. For example, if $J_2 = Q_0'$, replace the name of J2 in the schematic template by /Q0 and ignore whatever value shows up in the binary probe for J2.