

Daily Question (Sept 14)

1) $0 \xrightarrow{a} 0 \xrightarrow{b} 0 \xrightarrow{c} 1 \xrightarrow{b} 1 \xrightarrow{abbbb} 1 \xrightarrow{bbbb} 1 \xrightarrow{c} 2 \xrightarrow{bbb} 2 \xrightarrow{c} 3 \xrightarrow{abbc} 3$
Accepted.

2) Not accepted. There aren't enough c's to get into state 3 no matter what path is taken.

3) Not accepted. There is no path that leads to a final accepting state (we use up one of the c's in a reflexive loop because otherwise we wouldn't be able to get rid of the a's).

4) $0 \xrightarrow{abccabbbb} 0 \xrightarrow{c} 1 \xrightarrow{b} 1 \xrightarrow{abbbb} 1 \xrightarrow{c} 2 \xrightarrow{b} 2 \xrightarrow{abbbbb} 2 \xrightarrow{c} 3 \xrightarrow{babbbb} 3$
Accepted.

5) $0 \xrightarrow{a} 0 \xrightarrow{b} 0 \xrightarrow{c} 1 \xrightarrow{c} 2 \xrightarrow{abbbbb} 2 \xrightarrow{c} 3 \xrightarrow{abca...bbc} 3$
Accepted.