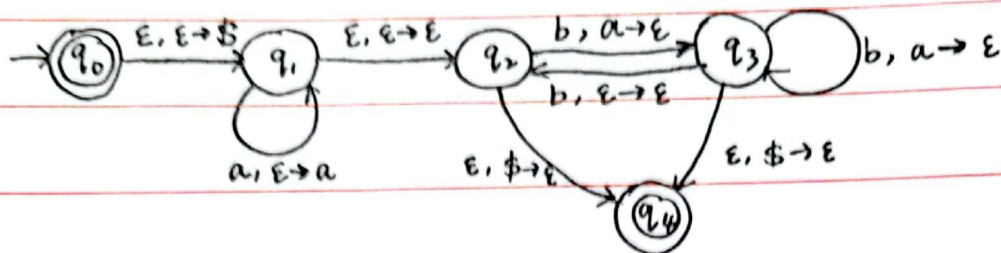




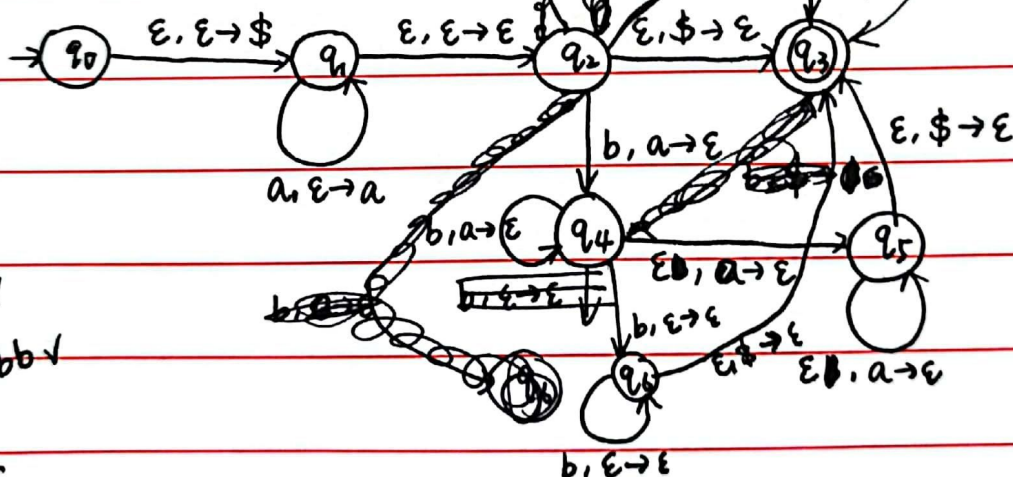
1.



路径:

$\langle q_0, aabbb, \epsilon \rangle \vdash \langle q_1, aabbb, \$ \rangle \vdash \langle q_1, abbb, a\$ \rangle \vdash \langle q_1, bbb, aa\$ \rangle$
 $\vdash \langle q_2, bbb, aa\$ \rangle \vdash \langle q_3, bb, a\$ \rangle \vdash \langle q_2, b, a\$ \rangle \vdash \langle q_3, \epsilon, \$ \rangle$
 $\vdash \langle q_4, \epsilon, \epsilon \rangle$

2.



aaabbb
aa ✓
aaab ✓
aabbbb ✓
bb ✓

路径:

$\langle q_0, aabbb, \epsilon \rangle \vdash \langle q_1, aabbb, \$ \rangle \vdash \langle q_1, abbb, a\$ \rangle$
 $\vdash \langle q_1, bbb, aa\$ \rangle \vdash \langle q_2, bbb, aa\$ \rangle \vdash \langle q_3, bb, a\$ \rangle$
 $\vdash \langle q_4, b, \$ \rangle \vdash \langle q_6, \epsilon, \$ \rangle \vdash \langle q_3, \epsilon, \epsilon \rangle$





3.

