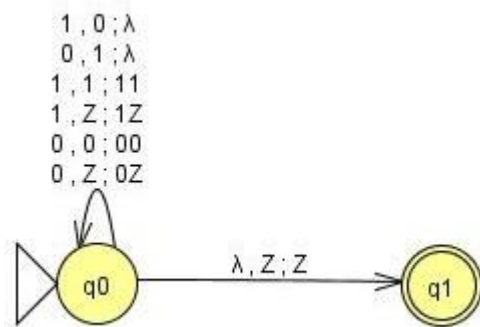
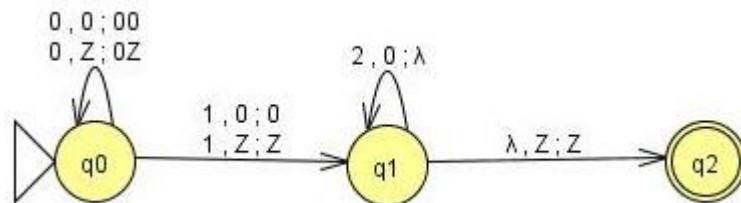


1.

a)

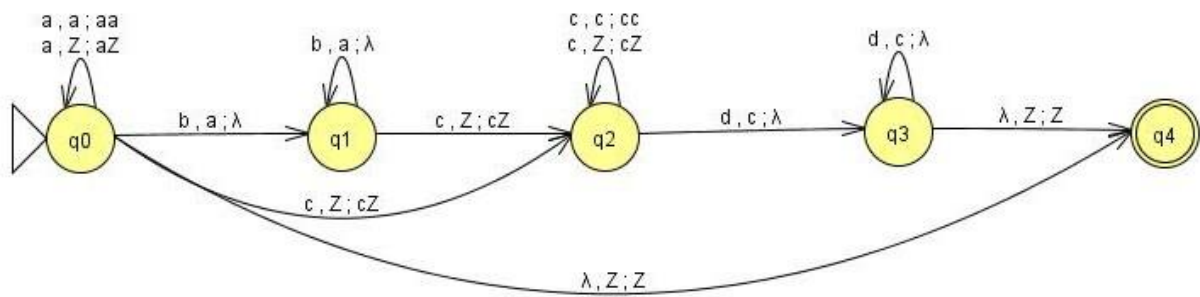


b)

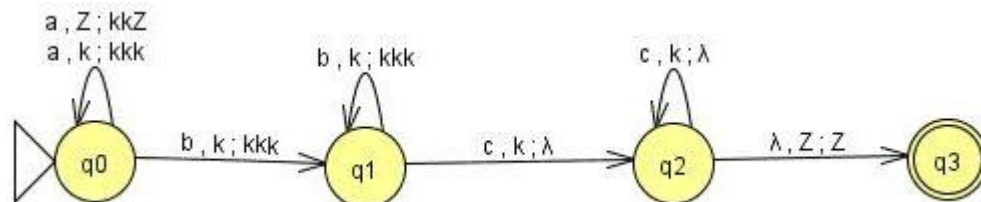


c)

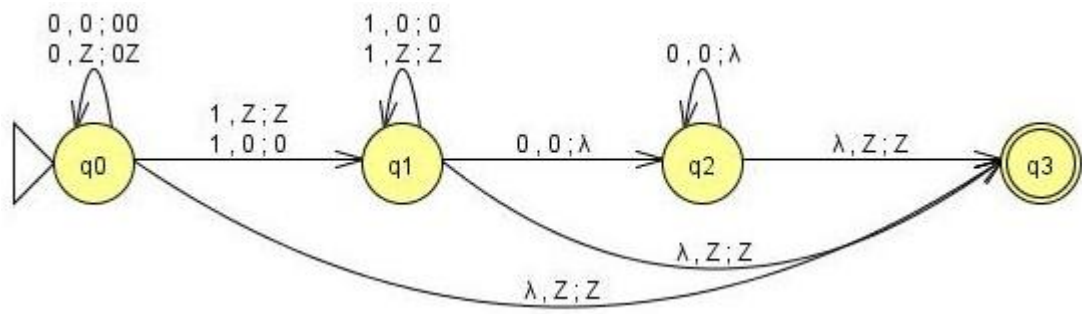
d)



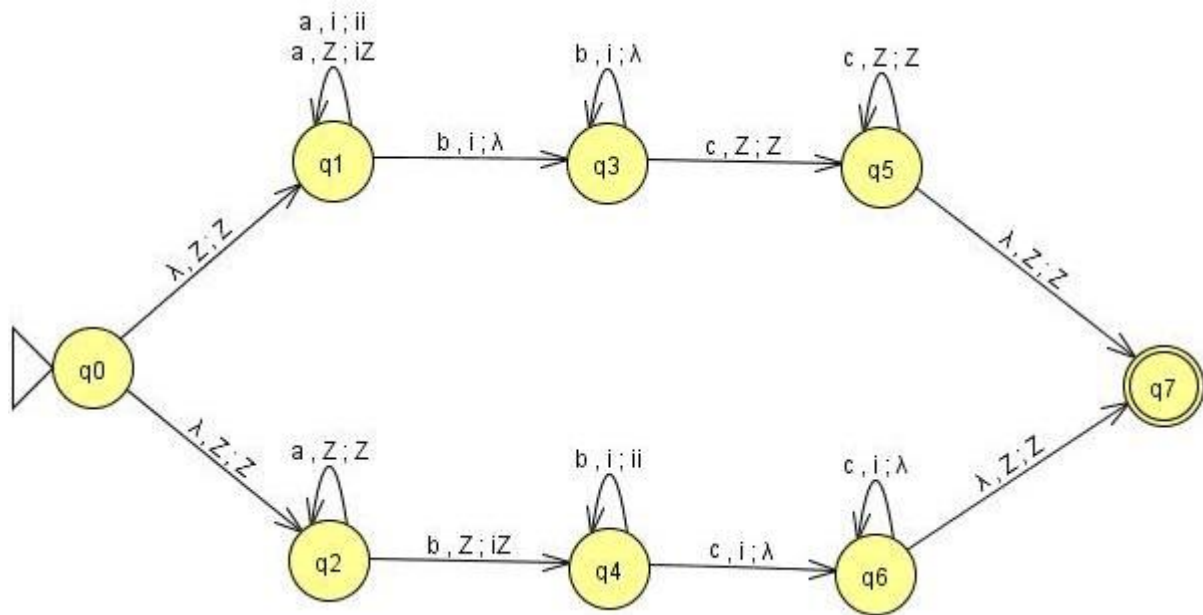
e)



f)



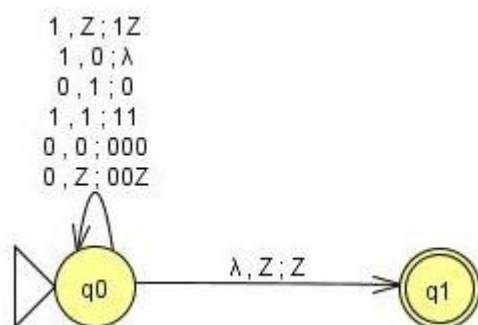
g)



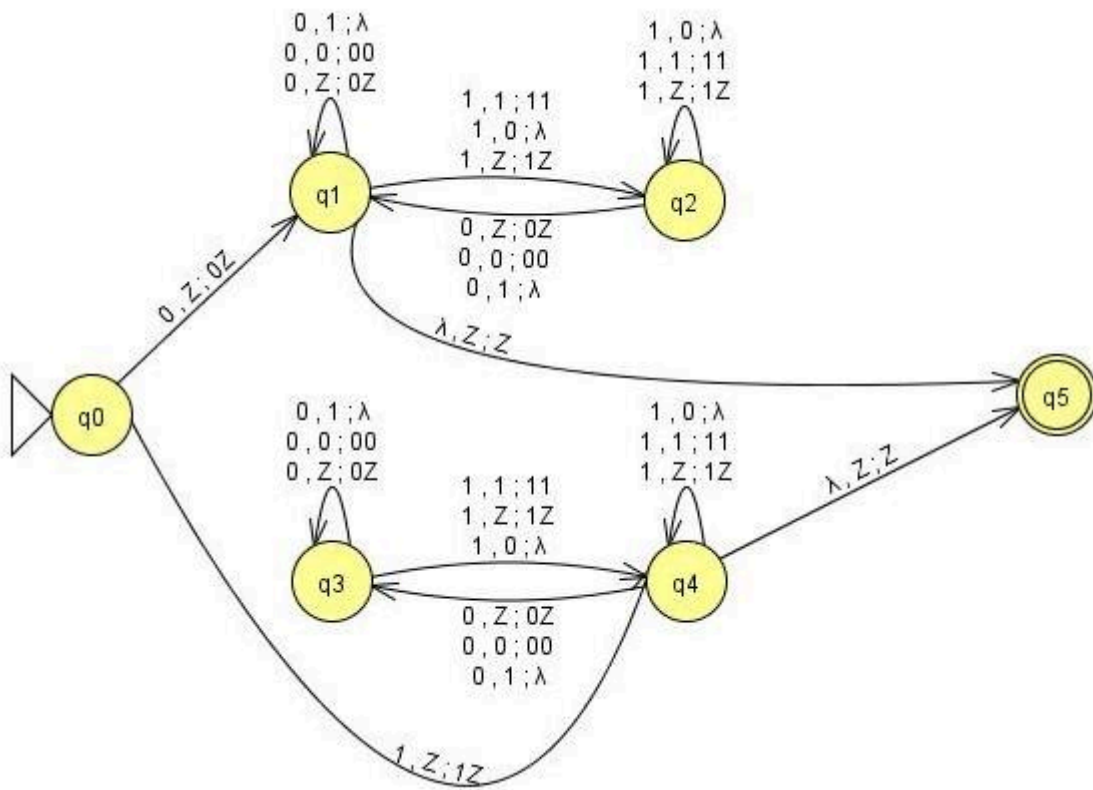
h)

2.

a)



b)



3.

- $(q_0, 1010, Z) \vdash (q_0, 010, 1Z) \vdash (q_0, 10, Z) \vdash (q_0, 0, 1Z) \vdash (q_0, e, Z) \vdash (q_1, e, Z)$
- $(q_0, 00122, Z) \vdash (q_0, 0122, 0Z) \vdash (q_0, 122, 00Z) \vdash (q_1, 22, 00Z) \vdash (q_1, 2, 0Z) \vdash (q_1, e, Z) \vdash (q_2, e, Z)$
-
- $(q_0, abccdd, Z) \vdash (q_0, bccdd, aZ) \vdash (q_1, ccdd, Z) \vdash (q_2, cdd, cZ) \vdash (q_2, dd, ccZ) \vdash (q_3, d, cZ) \vdash (q_3, e, Z) \vdash (q_4, e, Z)$
- $(q_0, abccccc, Z) \vdash (q_0, bccccc, kkZ) \vdash (q_1, cccc, kkkkZ) \vdash (q_2, ccc, kkkZ) \vdash (q_2, cc, kkZ) \vdash (q_2, c, kZ) \vdash (q_2, e, Z) \vdash (q_3, e, Z)$
- $(q_0, 00100, Z) \vdash (q_0, 0100, 0Z) \vdash (q_0, 100, 00Z) \vdash (q_1, 00, 00Z) \vdash (q_2, 0, 0Z) \vdash (q_2, e, Z) \vdash (q_3, e, Z)$
- ID de aceitação (PDA não determinístico): $(q_0, aabbc, Z) \vdash (q_1, aabbc, Z) \vdash (q_1, abbc, iZ) \vdash (q_1, bbc, iiZ) \vdash (q_3, bc, iZ) \vdash (q_3, c, Z) \vdash (q_5, e, Z) \vdash (q_7, e, Z)$