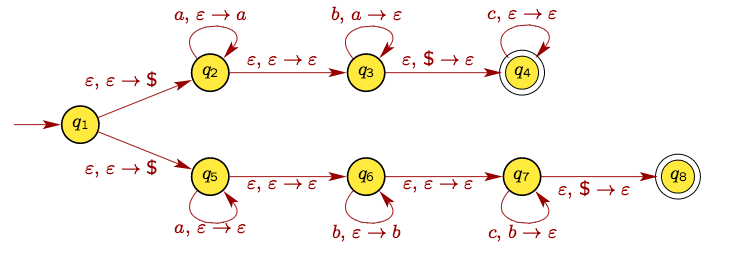
**PDA for L = (aibjck), i = j or j = k**

We will use non-deterministic PDA to solve this question, The PDA will have two non-deterministic branches: 

|  |  |
| --- | --- |
| **Branch 1 (for i = j)** | **Branch 2 (for j = k)** |
| (q0, e, $) |- (q1, $)  (q1, a, $) |- (q1, a)  (q1, a, a) |- (q1, aa)  (q1, b, a) |- (q1, ^)  (q1, c, $) |- (qf, $)  (qf, $, $) |- (qf, $) | (q0, e, $) |- (q2, $)  (q2, a, $) |- (q2, $)  (q2, b, $) |- (q2, b)  (q2, b, b) |- (q2, bb)  (q2, c, b) |- (q2, ^)  (q2, $, $) |- (qf, $) |