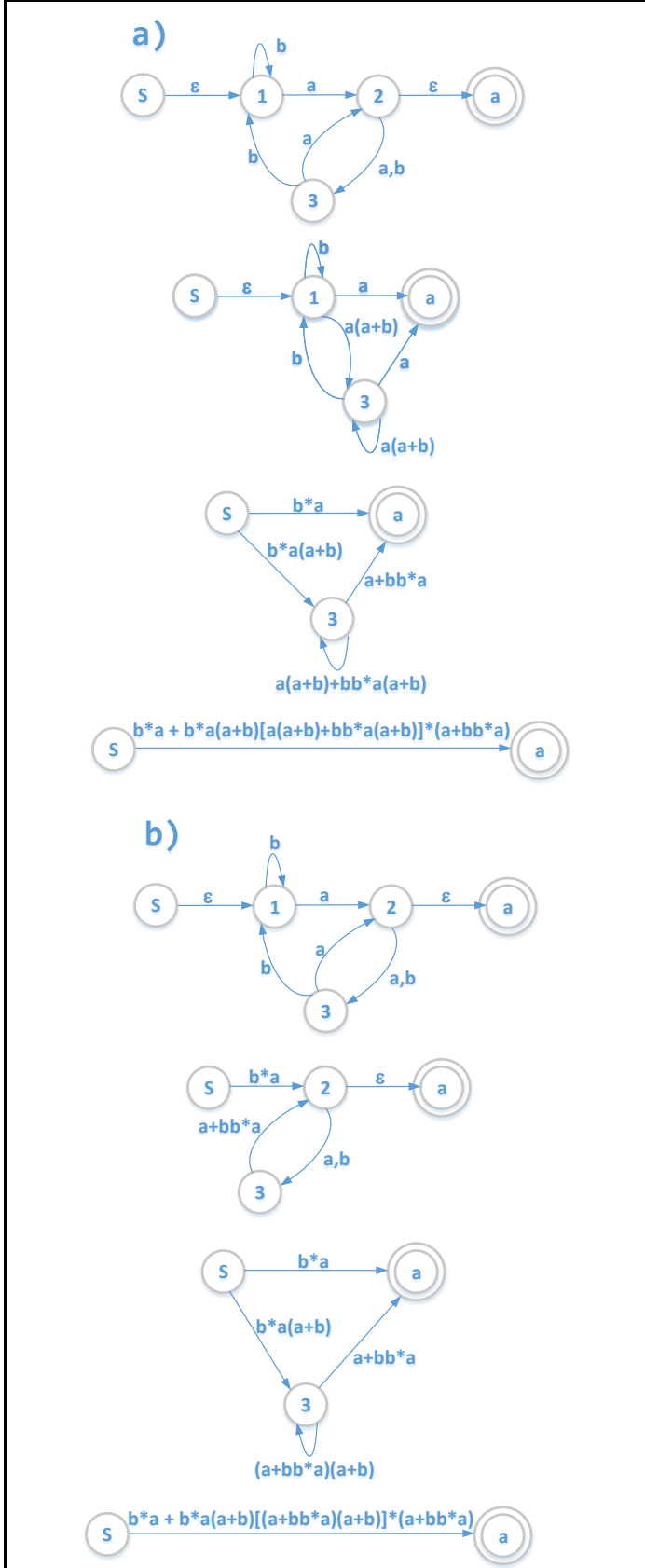




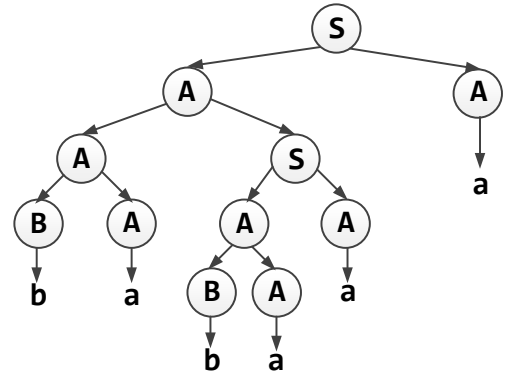
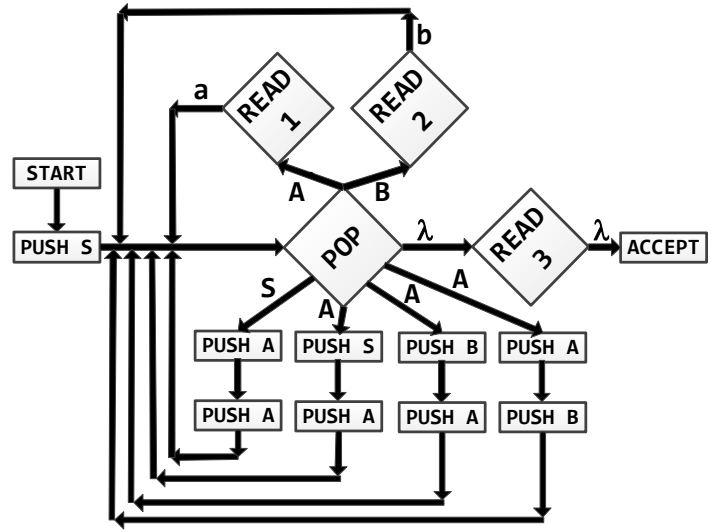
CEVAPLAR

1. a) q2, q1, q3 sırasında silerek RE elde ediniz. (15P)
b) q1, q2, q3 sırasında silerek RE elde ediniz. (15P)



$S \rightarrow AA$
 $A \rightarrow AS \mid AB \mid BA \mid a$
 $B \rightarrow b$

2. Yukarıdaki gramerin nondeterministic PDA eşdeğerini ve **babaaa** kelimesi için verilen parse ağacını kullanarak tabloyu doldurunuz. (30P)



	State	Stack	Tape	16	Push A	AA	babaaa
01	Push S	S	babaaa	17	Push A	AAA	babaaa
02	Pop	λ	babaaa	18	Pop	AA	babaaa
03	Push A	A	babaaa	19	Push A	AAA	babaaa
04	Push A	AA	babaaa	20	Push B	BAAA	babaaa
05	Pop	A	babaaa	21	Pop	AAA	babaaa
06	Push S	SA	babaaa	22	Read 2	AAA	babaaa
07	Push A	ASA	babaaa	23	Pop	AA	babaaa
08	Pop	SA	babaaa	24	Read 1	AA	babaaa
09	Push A	ASA	babaaa	25	Pop	A	babaaa
10	Push B	BASA	babaaa	26	Read 1	A	babaaa
11	Pop	ASA	babaaa	27	Pop	λ	babaaa
12	Read 2	ASA	babaaa	28	Read 1	λ	babaaa
13	Pop	SA	babaaa	29	Pop	λ	babaaa
14	Read 1	SA	babaaa	30	Read 3	λ	babaaa
15	Pop	A	babaaa	31	Accept	λ	babaaa

$S \rightarrow AA$
 $A \rightarrow AS \mid AB \mid BA \mid a$
 $B \rightarrow b$

3. 2. sorudaki gramer ve yine **babaaa** kelimesi için tüm parse ağaçlarını çiziniz. (40P)
İpucu \rightarrow 9 tane parse ağacı vardır.

B	A	A	S	A	S
A	A	S	A	S	
B	A	S	A		
A	S	A			
A	S				
A					

