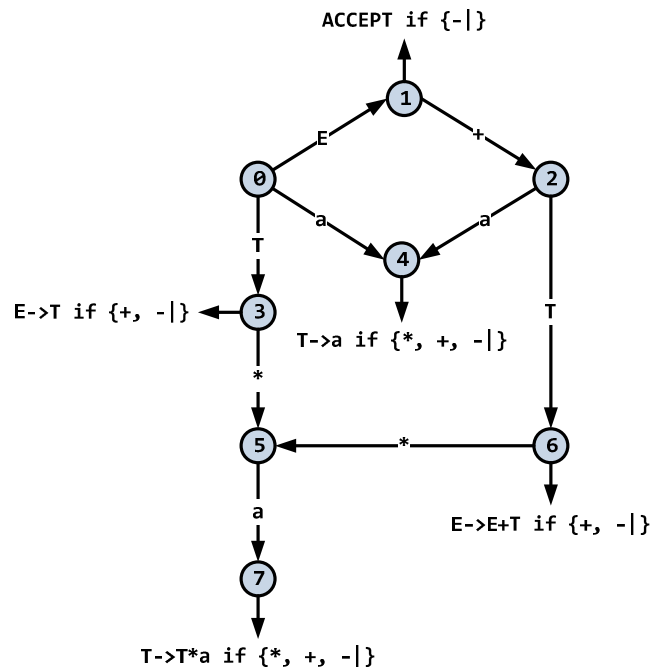


TA: Jade Cheng
ICS 312
Homework Solution #18
Due Date: November 03, 2009

Parsing Homework

Question: Use the parsing machine supplied in Slide set 24 to provide a parse of the string $a * a + a * a$. (Remember that you always need to add on the end-marker symbol)



Answer:	Step:	Stack Contents:	Remaining Input:
	1	Symbol: null State: 0	a * a + a * a -
	2	Symbol: a State: 0 4	* a + a * a -
	3	Symbol: T State: 0 3	* a + a * a -
	4	Symbol: T * State: 0 3 5	a + a * a -

5	Symbol: T * a State: 0 3 5 7	+ a * a -
6	Symbol: T State: 0 3	+ a * a -
7	Symbol: E State: 0 1	+ a * a -
8	Symbol: E + State: 0 1 2	a * a -
9	Symbol: E + a State: 0 1 2 4	* a -
10	Symbol: E + T State: 0 1 2 6	* a -
11	Symbol: E + T * State: 0 1 2 6 5	a -
12	Symbol: E + T * a State: 0 1 2 6 5 7	-
13	Symbol: E + T State: 0 1 2 6	-
14	Symbol: E State: 0 1	-
15	ACCEPT	