

Give a parse table for the following grammar. (S is the start symbol.)

1. $S \rightarrow ABe$
2. $A \rightarrow dB$
3. $A \rightarrow aS$
4. $A \rightarrow c$
5. $B \rightarrow AS$
6. $B \rightarrow b$

$$V = \{S, A, B, a, b, c, d, e\}$$

x	a	b	c	d	e	#
S	ABe		ABe	ABe		
A	aS		C	dB		
B	AS	b	AS	AS		
a	A pop					
b		B pop				
c			A pop			
d				A pop		
e					A pop	
#						accept

2)

Using your parse table in Problem 1, give the state of the input string and stack at every iteration using the input string dbbe. Is the string accepted or rejected?

Stack	Input String
S#	dbbe#
ABe#	dbbe# ↑
dBBe#	dbbe# ↑
BBe#	dbbe# ↑
bBe#	dbbe# ↑
Be#	dbbe# ↑
e#	dbbe# ↑
#	dbbe# ↑
ACCEPT!	