

Quiz 9 Solution

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1. $S \rightarrow Z$

2. $Z \rightarrow X [Z]$

3. $Z \rightarrow w Y$

4. $X \rightarrow v$

5. $X \rightarrow \varepsilon$

6. $Y \rightarrow u Z$

7. $Y \rightarrow \varepsilon$

$\text{First}(S) = \text{First}(Z)$

$= w, v, [$

$\text{First}(Z) = w, \text{First}(X)$

$= w, v, [$

$\text{First}(X) = v, \varepsilon$

$\text{First}(Y) = u, \varepsilon$

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$\text{Follow}(S) = \text{eof}$

$\text{Follow}(Z) = \text{Follow}(S),], \text{Follow}(Y)$
 $= \text{eof},]$

$\text{Follow}(X) = [$

$\text{Follow}(Y) = \text{Follow}(Z)$
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$\text{First}^+(1) = w, v, [$

$\text{First}^+(2) = v, [$

$\text{First}^+(3) = w$

$\text{First}^+(4) = v$

$\text{First}^+(5) = [$

$\text{First}^+(6) = u$

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LL(1) Parse Table

	eof	w	v	[]	u
S		1	1	1		
Z		3	2	2		
X			4	5		
Y	7				7	6