

Drew Beck

CSCI 305

Homework 1

History

- 1) C.
- 2) H.
- 3) B.
- 4) D.
- 5) E, G, H.

Grammar and Syntax

1a) $\langle S \rangle ::= \text{begin } \langle \text{statement} \rangle; \langle X \rangle$

$\langle X \rangle ::= \langle \text{statement} \rangle; \langle X \rangle \mid \text{end}$

1b) $\langle S \rangle ::= [\langle \text{digit-string} \rangle]$

$\langle \text{digit-string} \rangle ::= \langle \text{digit} \rangle \mid \langle \text{digit} \rangle, \langle \text{digit-string} \rangle$

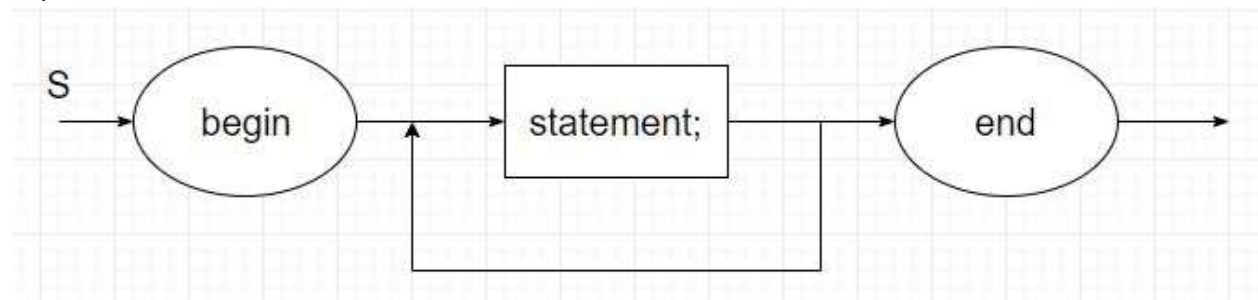
$\langle \text{digit} \rangle ::= 1 \mid 2 \mid 3 \mid 4 \mid 5 \mid 6 \mid 7 \mid 8 \mid 9 \mid 0$

2a) $\langle S \rangle ::= \text{begin } \langle \text{statement} \rangle; \{ \langle \text{statement} \rangle; \} \text{end}$

2b) $\langle S \rangle ::= ['\langle \text{digit} \rangle\{, \langle \text{digit} \rangle\}']$

$\langle \text{digit} \rangle ::= 1 \mid 2 \mid 3 \mid 4 \mid 5 \mid 6 \mid 7 \mid 8 \mid 9 \mid 0$

3a)



3b)

