

### Ejercicio 4.3

- First y Follow
- ¿Es una gramática LL(1)?

$$S \rightarrow Aa$$

$$A \rightarrow Bd$$

$$B \rightarrow b$$

$$B \rightarrow \epsilon$$

$$D \rightarrow d$$

$$D \rightarrow \epsilon$$

$$\text{First}(S) = \{b, d, a\}$$

$$\text{first}(A) = \{b, \epsilon, d\}$$

$$\text{First}(B) = \{b, \epsilon\}$$

$$\text{first}(D) = \{d, \epsilon\}$$

$$\text{follow}(S) = \{a\}$$

$$\text{Follow}(A) = \{a\}$$

$$\text{follow}(B) = \{d, a\}$$

$$\text{Follow}(D) = \{a\}$$

$$\text{Follow}(B) \cap \{\text{first}(b) \cup \text{First}(\epsilon)\}$$

$$= \{d, a\} \cap \{b\} = \emptyset$$

$$\text{Follow}(D) \cap \{\text{first}(d) \cup \text{First}(\epsilon)\}$$

$$= \{a\} \cap \{d\} = \emptyset$$