



**States**  $\{\emptyset, 1, 2, 3, 4, \text{SINK}\}$

**Initial State**  $\emptyset$

**Input Alphabet**  $\{(E, B), (C, A), (H, B), (F, D)\}$

**Output Alphabet**  $\{P, q, r, \text{HOLE}, \text{SINK}\}$