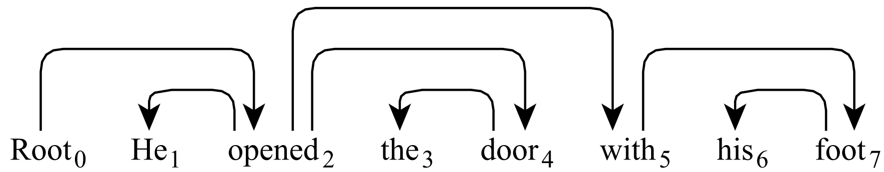
Show the sequence of transitions in a shift-reduce parser that would result in the following dependency tree.



Initialization	$\langle S = [w_0], I = [w_1, \ldots, w_n], A = \emptyset \rangle$	
Termination	$\langle S, [\,], A \rangle$	
Left-Arc	$\langle w_i \vert S, w_j \vert I, A \rangle \Rightarrow \langle S, w_j \vert I, A \cup \{w_i \leftarrow w_j\} \rangle$	$\neg \exists w_k . (w_i \leftarrow w_k) \in A$
Right-Arc	$\langle w_i \vert S, w_j \vert I, A \rangle \Rightarrow \langle w_j \vert w_i \vert S, I, A \cup \{w_i \rightarrow w_j\} \rangle$	$\neg \exists w_k . (w_k \rightarrow w_j) \in A$
Shift	$\langle w_i \vert S, w_j \vert I, A \rangle \Rightarrow \langle w_j \vert w_i \vert S, I, A \rangle$	
Reduce	$\langle w_i \vert S, w_j \vert I, A \rangle \Rightarrow \langle S, w_j \vert I, A \rangle$	$\exists w_k . (w_i \leftarrow w_k) \in A$