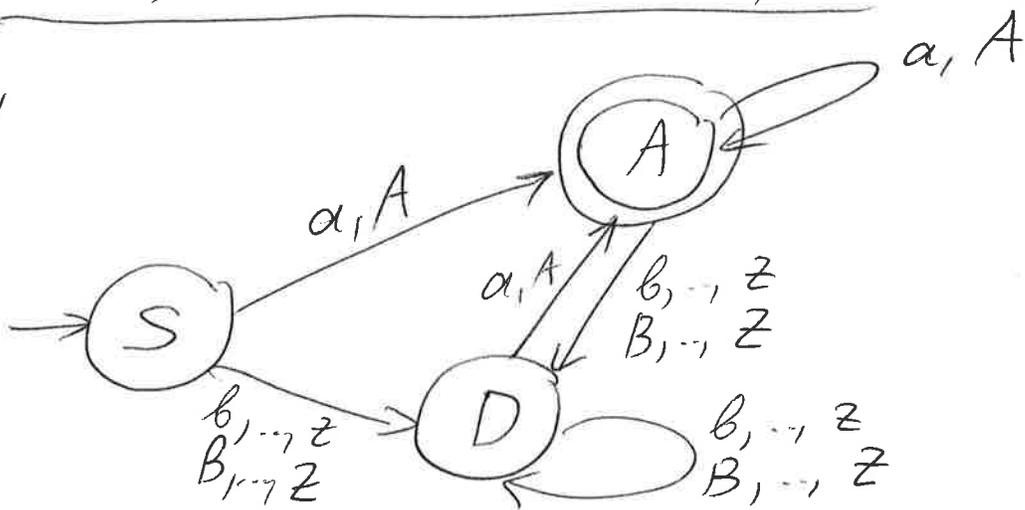


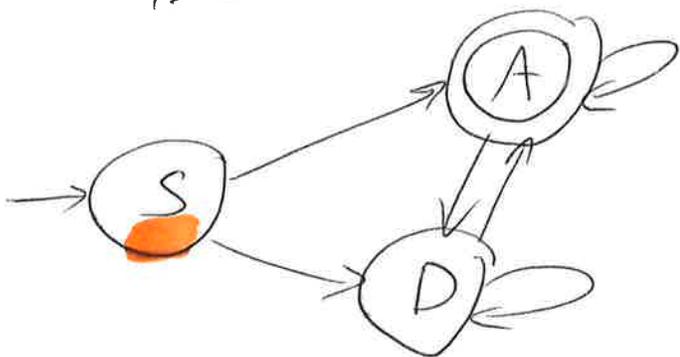
HW1, SPRING 2024, P.1

1.1

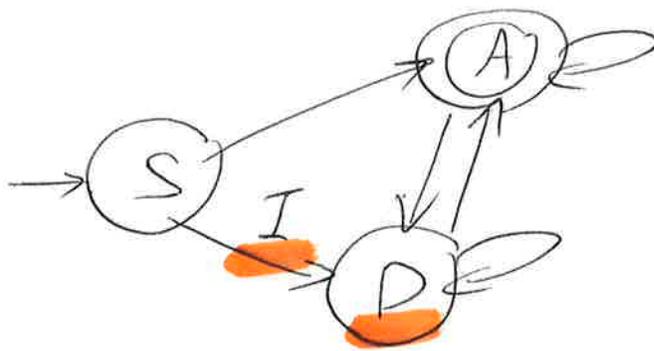


1.2. Word Iva

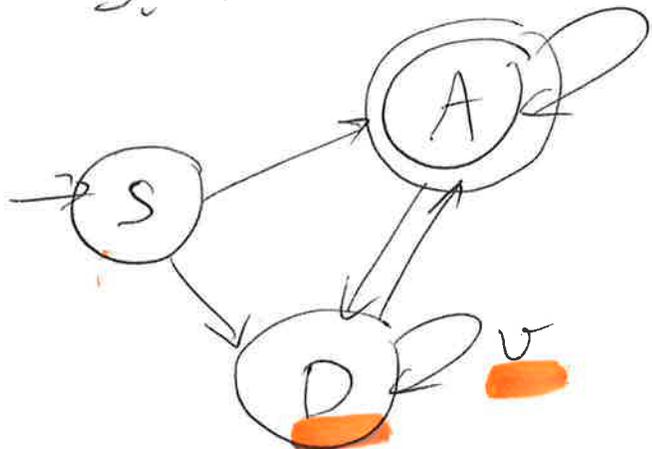
1. start



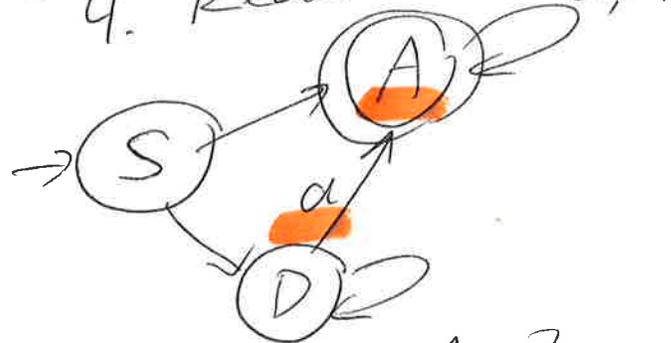
2. Read I



3. Read v



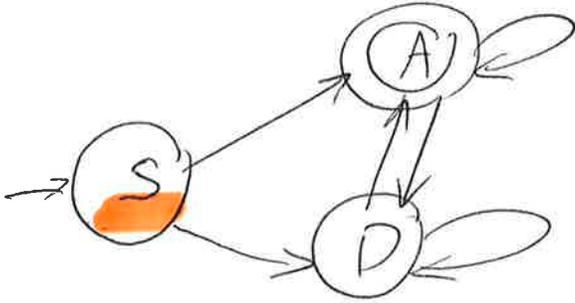
4. Read a



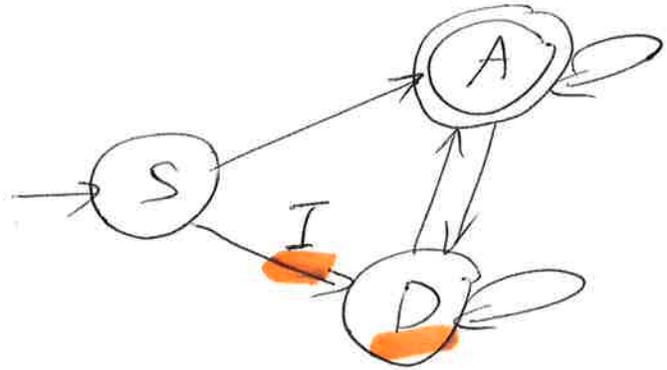
The state is A, it is final, so Iva is accepted

HW1, SPRING 2024, P.2

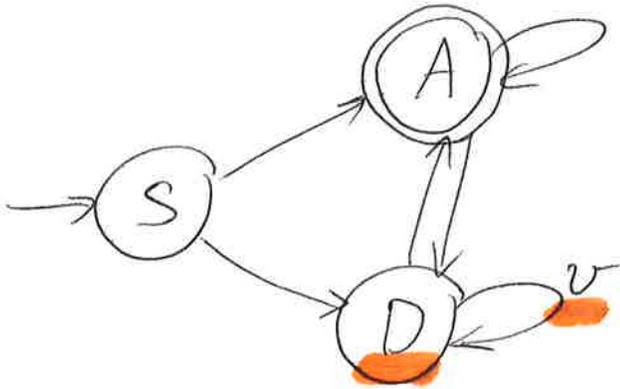
1. Start



2. Read I



3. Read v



We end up in state D which is not final, so the word is not accepted

HW 1, SPRING 2024, P. 3

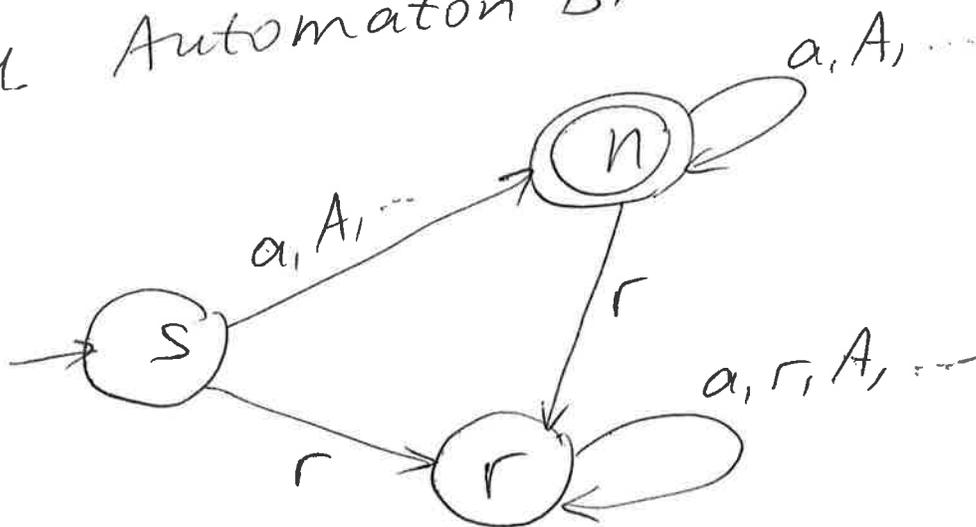
1.3 $Q = \{S, P, D\}$
 $\Sigma = \{a, r, A\}$

$\delta:$

	S	P	D
a	A	A	A
r	D	D	D
A	A	A	A

$q_0 = S$
 $F = \{A\}$

1.4 Automaton B:



HW1, SPRING 2024, P. 4

