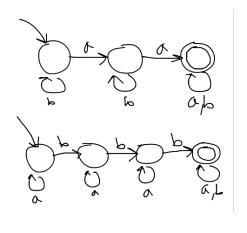
$\begin{array}{c} {\rm Hw1} \\ {\rm Jackson~Mowry} \\ <\!2024\text{-}09\text{-}08~Sun}\!> \end{array}$

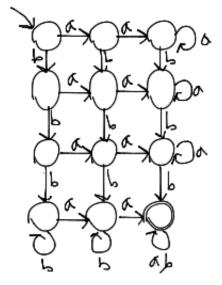
Contents

Ι	Problem 1	1
Π	Problem 2	3

I Problem 1

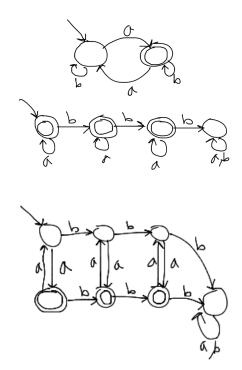
1. $\{w \mid w \text{ has at least 2 a's and at least 3 b's}\}$





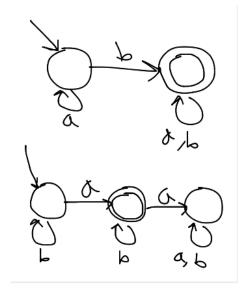
simple, then final

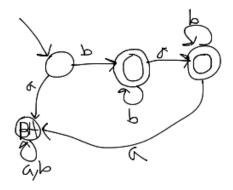
1. $\{w \mid w \text{ has an odd number of a's and no more than 2 b's}\}$



simple, then final

1. {w | w starts with the character b and has at most 1 a}

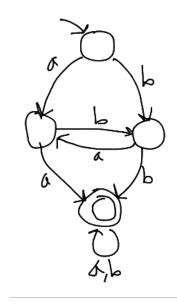


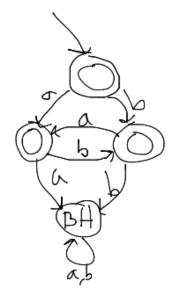


simple, then final

II Problem 2

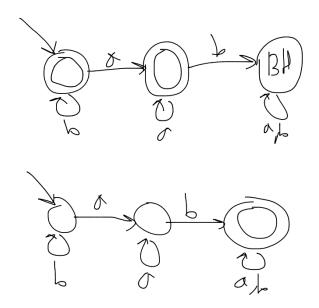
1. $\{w \mid w \text{ contains neither the substring aa nor the substring bb}\}$





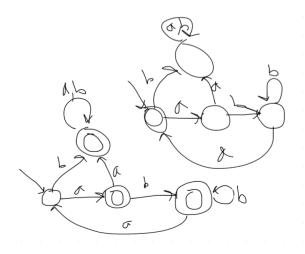
Simple first, final last

1. $\{w \mid w \text{ is any string not in } b^*a^*\}$



Simple top, final bottom

1. $\{w \mid w \text{ is any string not in } (ab^+a)^*\}$



Simple top right, final bottom left