

N1:  $a^i b^j c^k$   $i \geq 0, j > 0, k = i + j$

case 1:

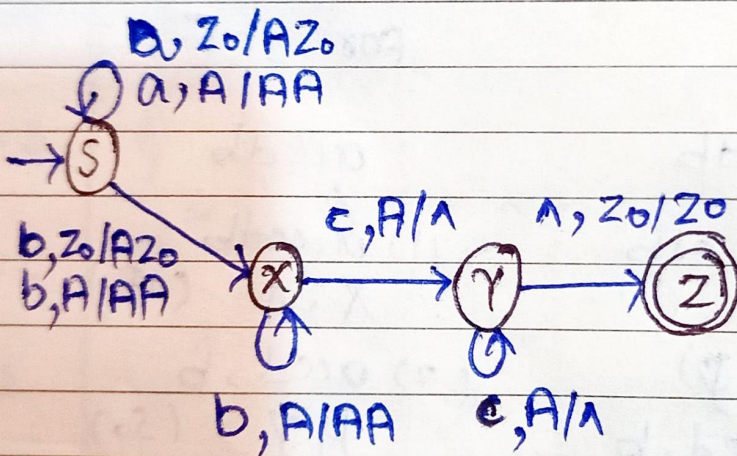
$i = 0$

$(b^j c^j)$  (same length of b's & c's)

case 2:

$i > 0$

$(a^i b^j c^{i+j})$



N2:  $a^i b^j c^k$   $i > 0, k \geq 0, j = i + k$

case 1:

$k = 0$

$(a^i b^i)$

case 2:

$k > 0$

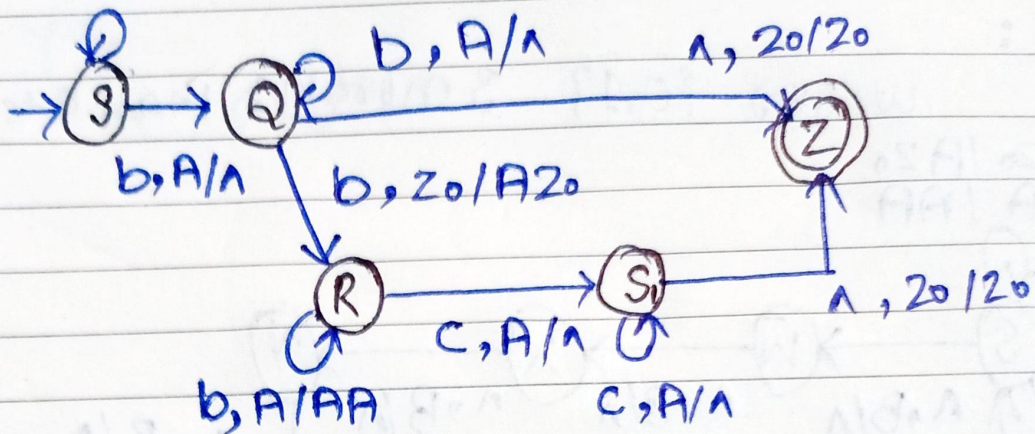
~~$(a^i b^j c^{i+j})$~~   $(a^i b^{i+k} c^k)$



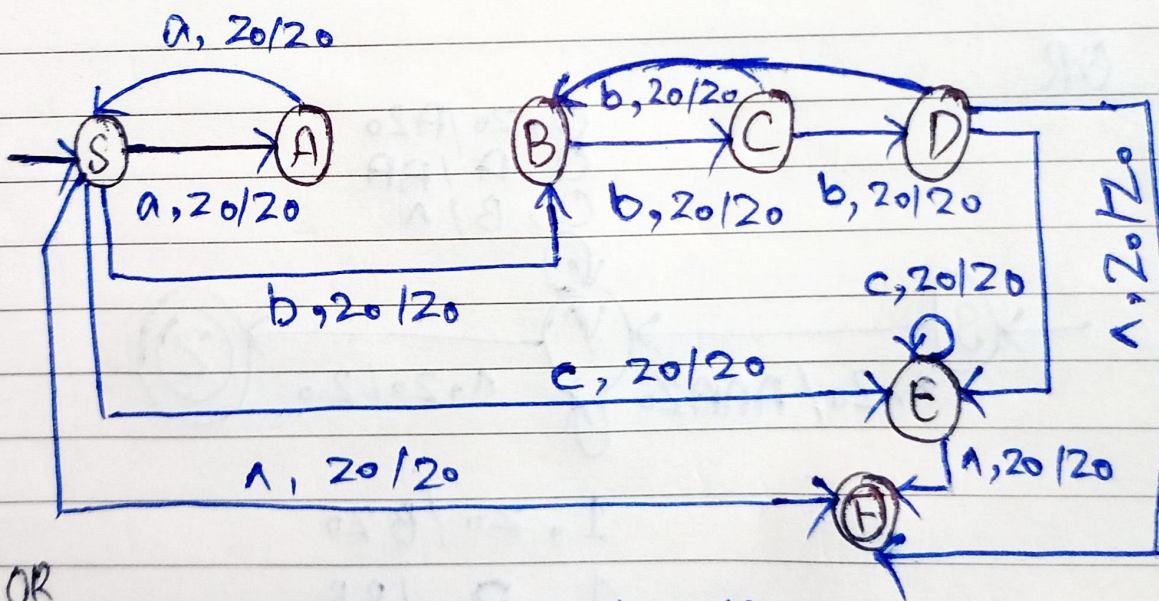
Date: \_\_\_\_\_

No magic, just logic.

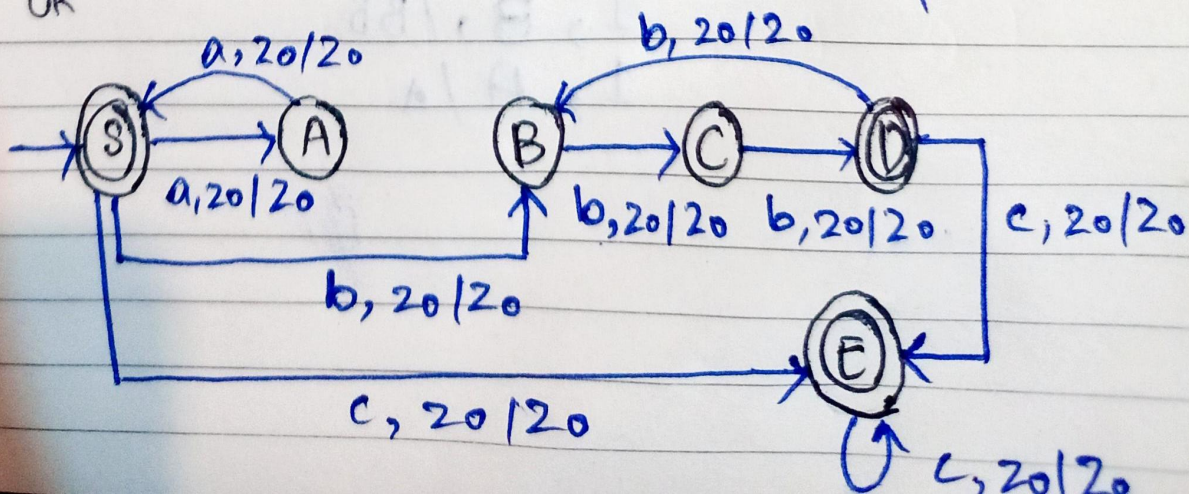
$a, A/AA$   
 $a, 20/A20$



Y1:  $a^2 i b^3 j c^k$  |  $i, j, k \geq 0$   
 cases (8-9)



OR





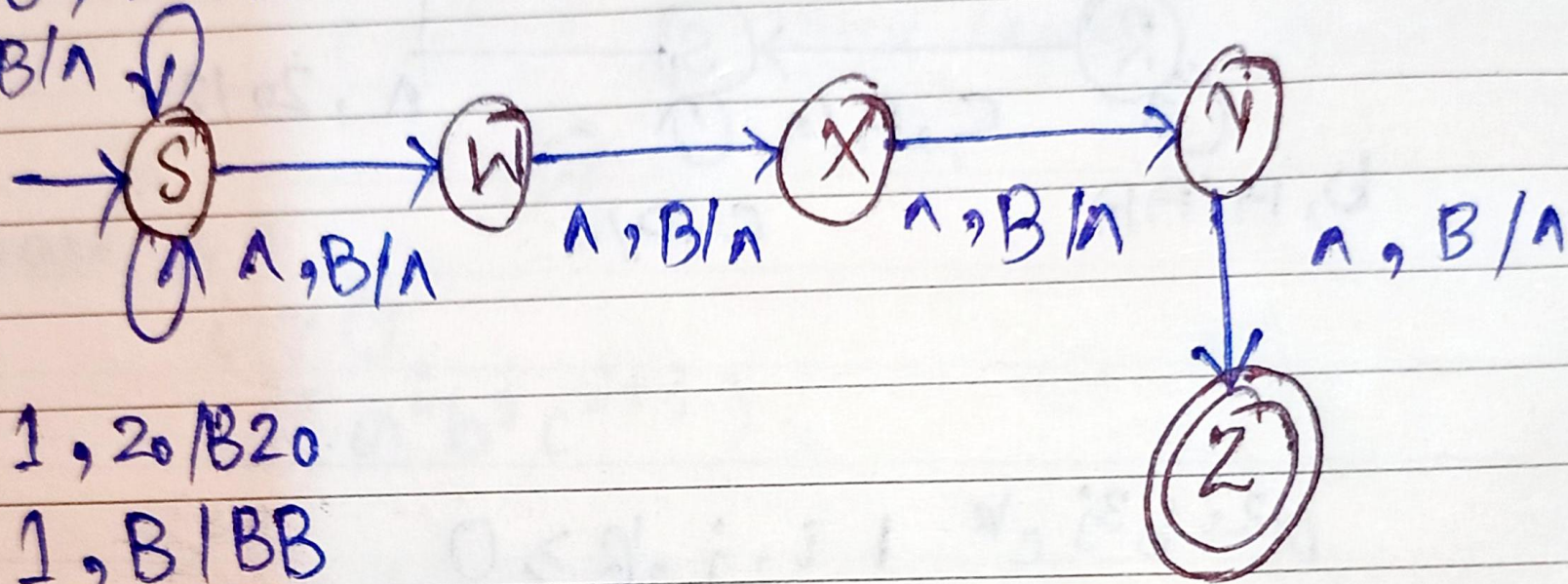
Y2:

w over  $\{0,1\}$  3 more 1's than 0's

0, 20 / A 20

0, A / AA

0, B /  $\Lambda$



1, 20 / B 20

1, B / BB

1, A /  $\Lambda$