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Problem 2)

in: 1 · 8 bit   4 bits
hidden: 2 · 1 · 8 + 1 · 8 bits
out: 2 · 2 · 8 + 1 · 8

formula: (in + in·hid) + 1 + hid·out + 1) · 8

$(4 + 4·10 + 10·3 + 1) · 8 = 76·8 = \boxed{608 \text{ bits}}$

a)

3 4 polls 1	5 3 polls 1	add bias 7
4 4 polls 2	6 3 polls 2	add bias 8
9 5 polls 3	11 6 polls 3	add bias 13
10 5 polls 4	12 6 polls 4	add bias 14

14 States → 0 → 1101
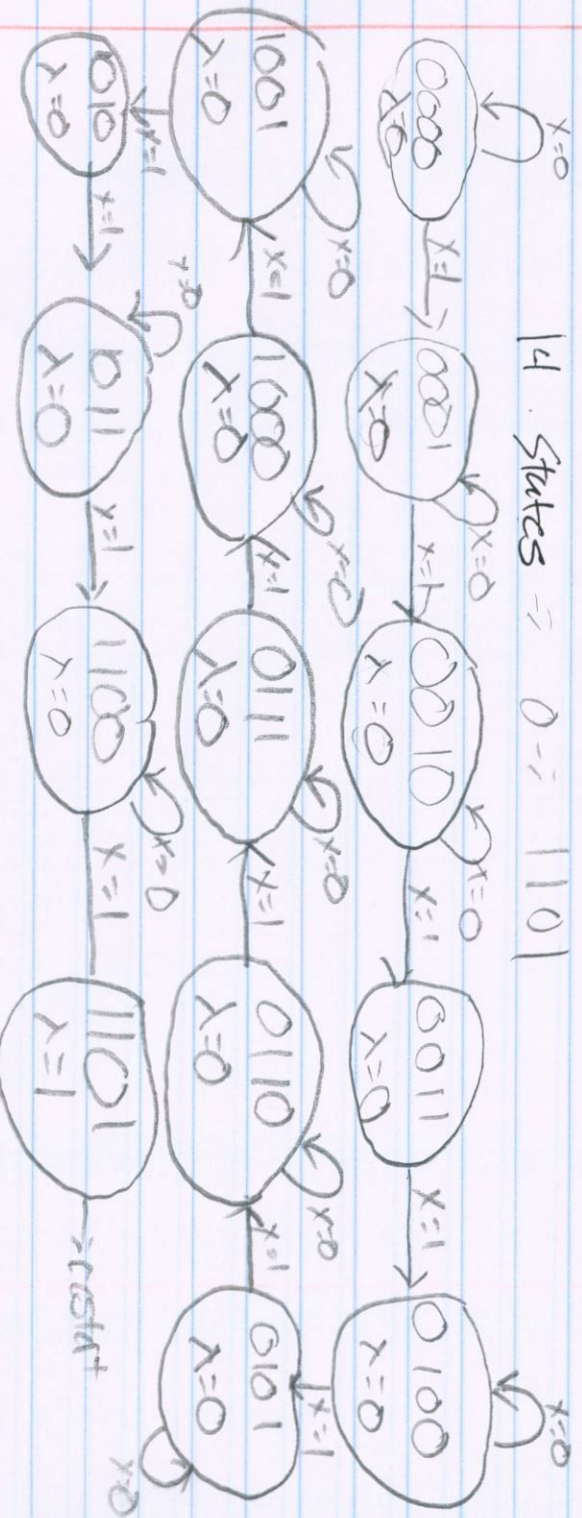
b) considering I actually drew mine out in a way linear Model then it luckily shouldn't affect it although I'm sure this is a very 'slow' way to do this.