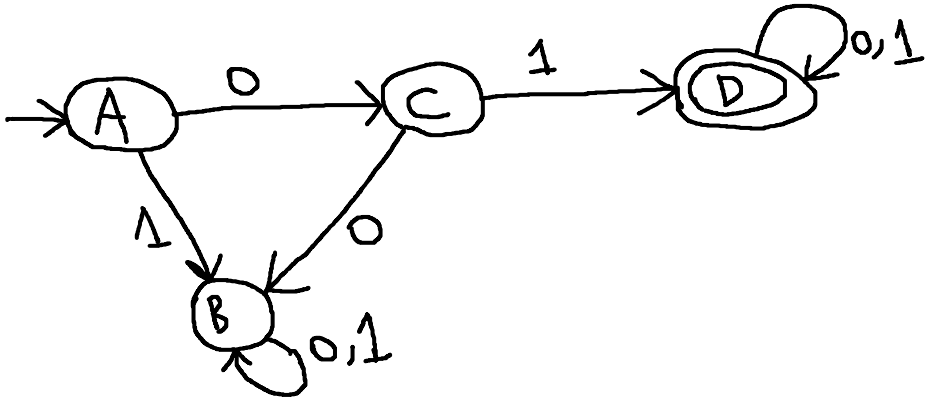
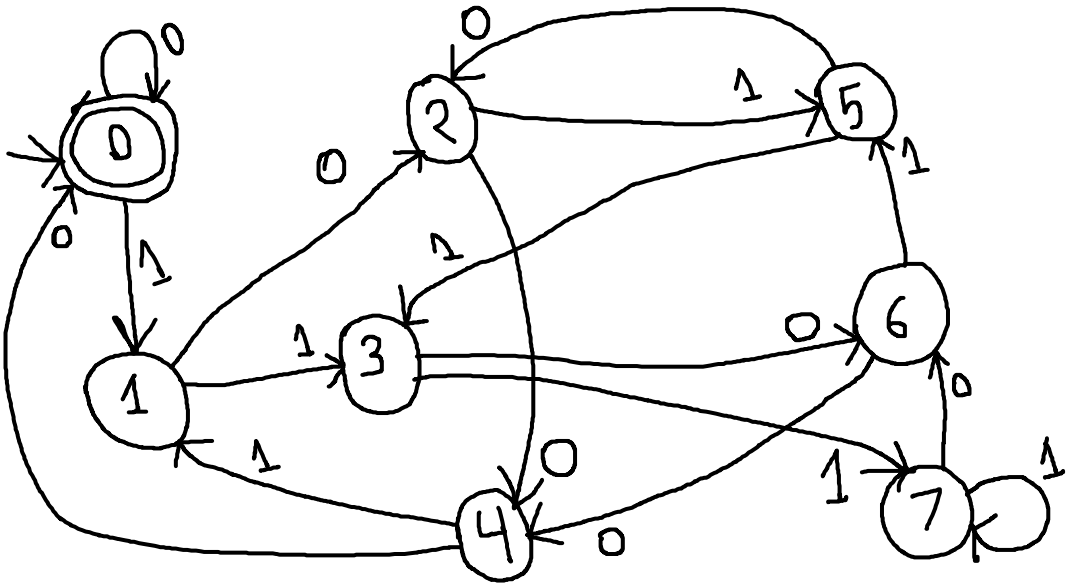
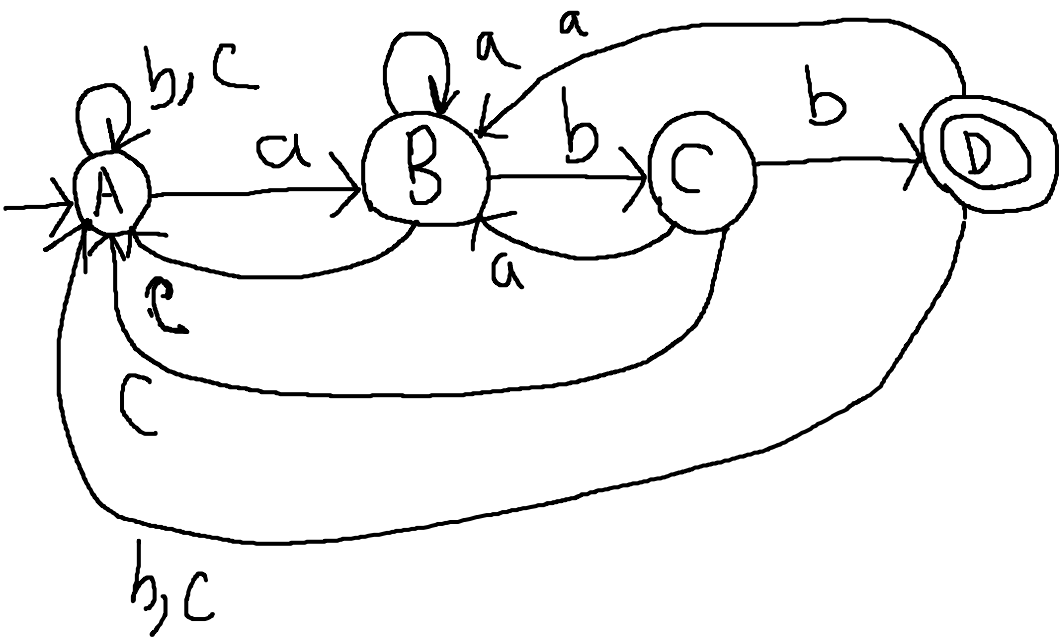
1. Draw a DFA for the set of binary strings that start with **01**. ∑ = {0,1}



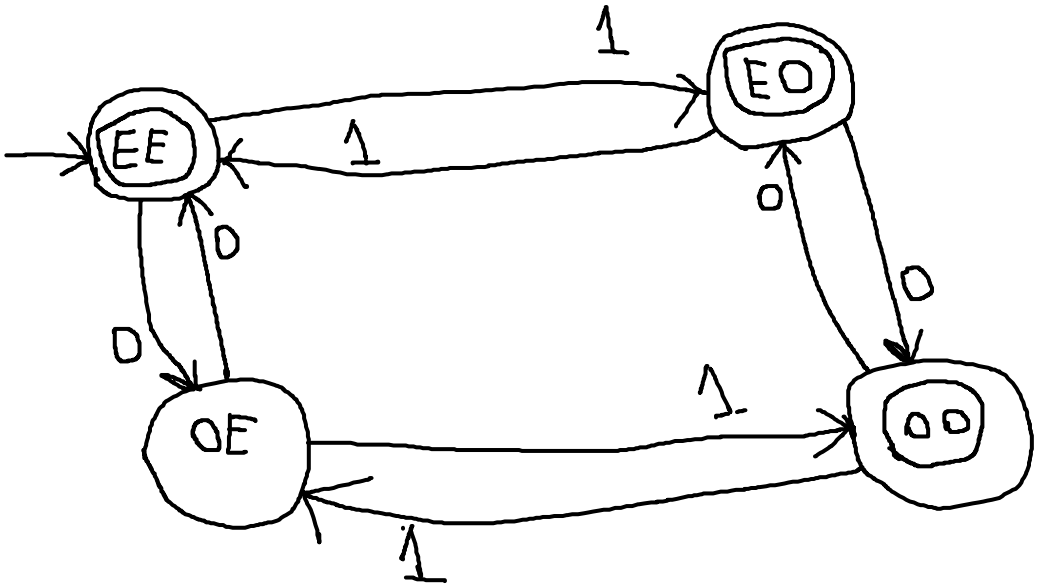
2. Draw a DFA for the set of binary strings that are divisible by 8 while considered as binary numbers. ∑ = {0,1}



3. Draw a DFA for the set of strings that end with **abb**. ∑= {a, b, c}



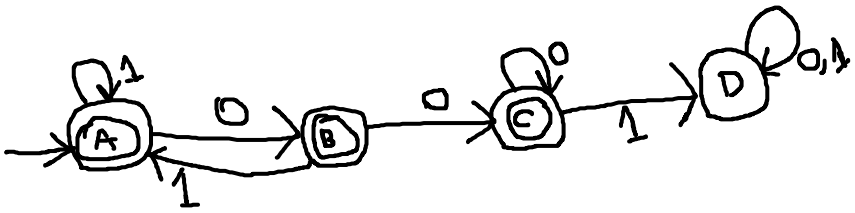
4. Draw a DFA for the set of binary strings that have an even number of **0**'s or an odd number of **1**'s. ∑ = {0,1}



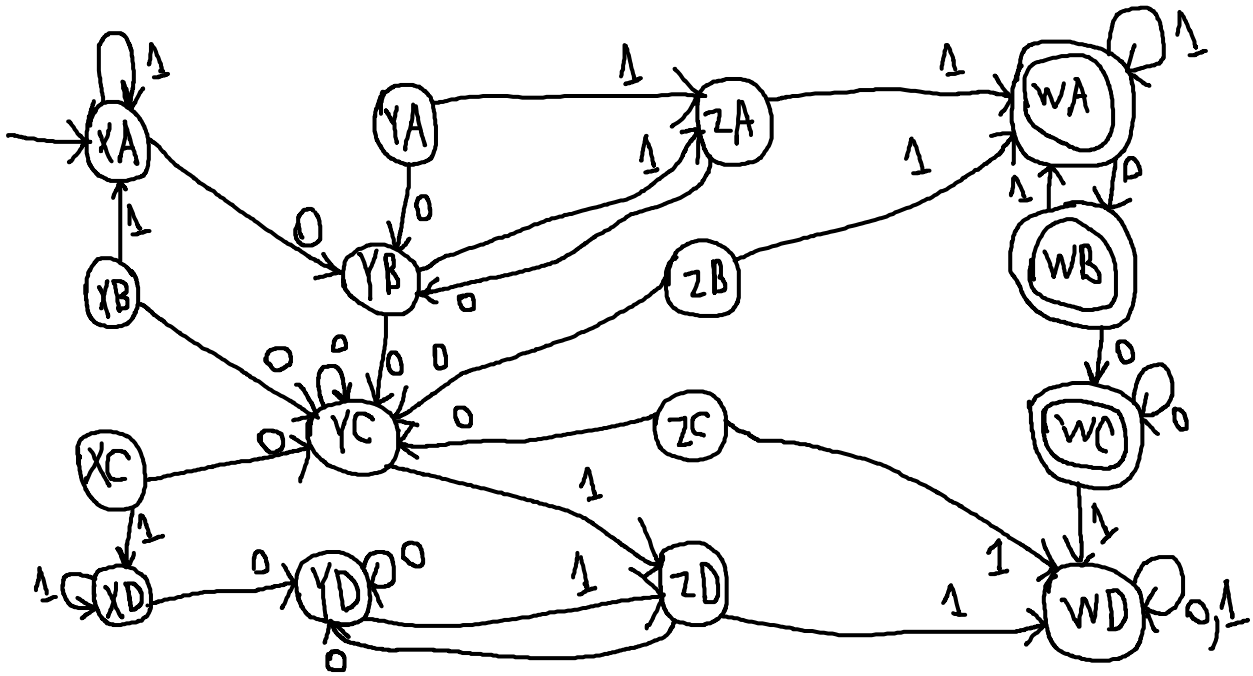
5. Draw a DFA for the set of strings that have **011** as a substring and **001** as not a substring. ∑ = {0,1}

DFA for 011 as a Substring

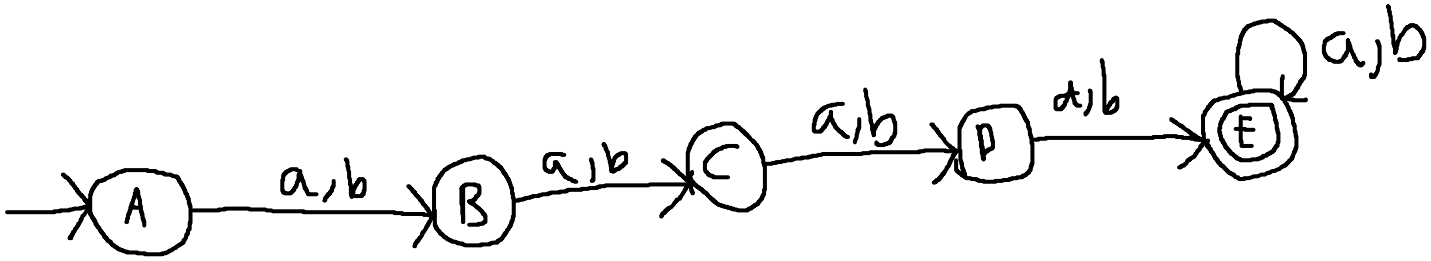
DFA for 001 as not a substring



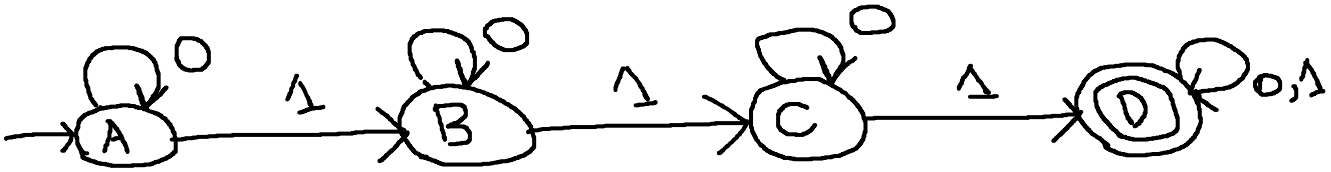
Cross Product of the two DFA



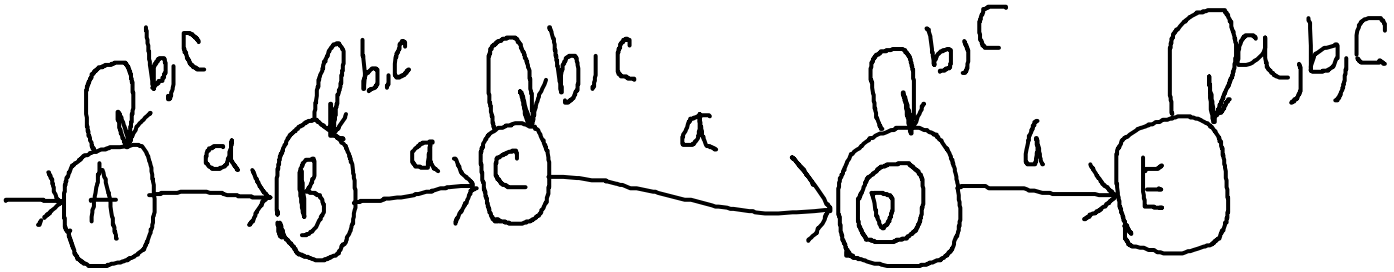
6. Draw a DFA for the set of strings that have a length of at least **4**. ∑ = {a, b}



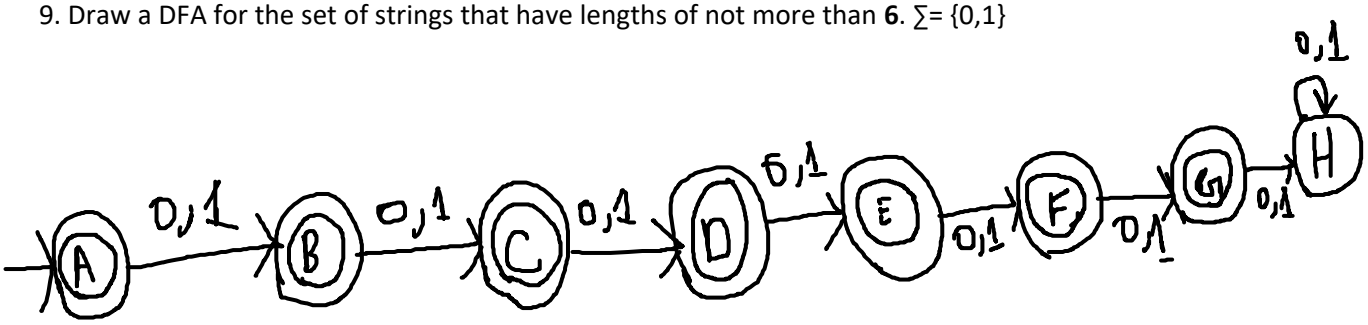
7. Draw a DFA for the set of binary strings that contain at least three **1**'s. ∑ = {0,1}



8. Draw a DFA for the set of strings that have exactly three **a**'s. ∑= {a, b, c}

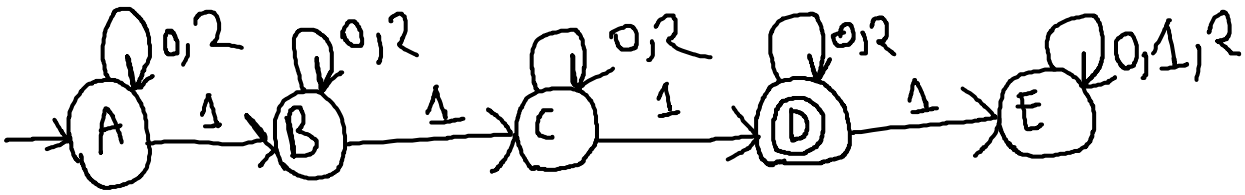


9. Draw a DFA for the set of strings that have lengths of not more than **6**. ∑= {0,1}

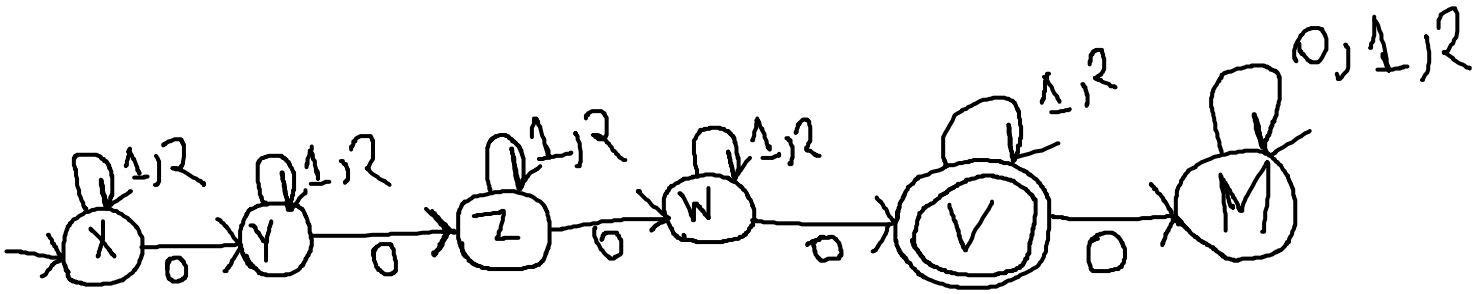


10. Draw a DFA for the set of strings that have exactly three **1**'s and four **0**'s. ∑= {0,1,2}

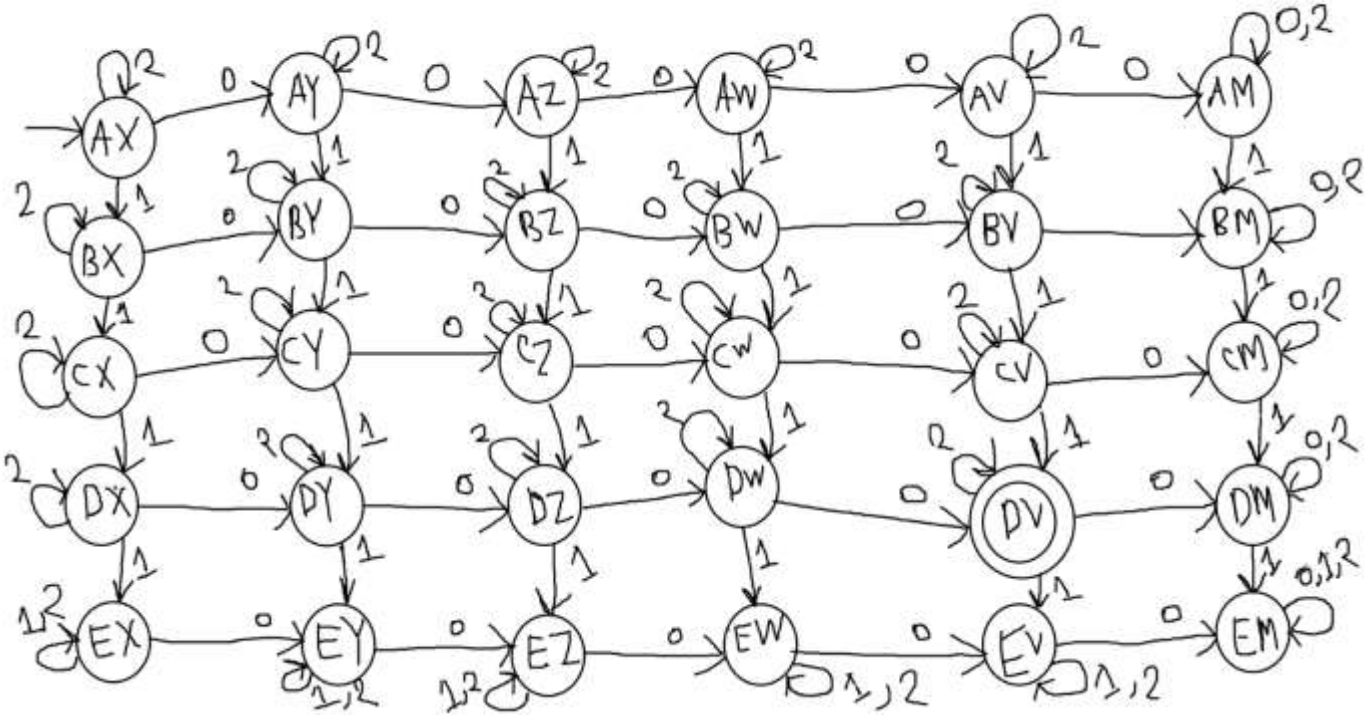
DFA for exactly three 1



DFA for exactly four 0



Cross product of the two DFA



11. Draw a DFA for the set of strings that have **three** consecutive **1**'s. ∑= {0,1}