**DFA examples**

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| 1. Design a DFA that accepts the language of strings that starts with ‘**r’** and ends with ‘**pq’** over the alphabet {p,q,r}. |

1. Design a DFA for the following language, L = { starts with **‘mn’** and contains **‘xm’** and ends with **‘x’ }**  | Σ = {m,n,x}
2. Design a DFA for the following language, L = { w | w starts with **“ab”** and contains **“bba”** and ends with **“bb”**} | Σ = {a, b}
3. Design a DFA for the following language, L= { starts with **‘c’** *and* contains **‘abc’** or **‘bca’** *and* ends with **‘b’ }**  | Σ = {a,b,c}
4. Design a DFA for the following language, L= {contains **‘zyx’** and ends with **‘zy’}** | Σ = {x,y,z}
5. Design a DFA for the following language, L= { starts with **‘0’** and contains **‘110’** and ends with **‘01’** } | Σ = {0,1}
6. Design a DFA for the following language, L = { starts with **‘gh’** and contains **‘kgh’** and ends with **‘gh’** } | Σ = {g,h,k}
7. Design a DFA for the following language, L = { starts with **‘11’** and contains either **‘010’ or ‘101’**} | Σ = {0,1}

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