Introduction

Convert simple regular expressions to minimum deterministic finite automaton. (Regex => NFA => DFA =>

• r = (s)• r = st

• r = s|t

(Copy this character to input if needed)

• r = s* • r = s+ • r = s? • r = €

Supported grammars

Min-DFA)

 $(A|B|C|E|F|G|H|I|J|K|L|M|N|O|P|Q|R|S|T|U|V|W|X|Y|Z|a|b|c|d|e|f|g|h|i|j|k|1|m|n|o|p|q|r|s|t|u|v|w|x|y|z|_) + (0|1|2|3|4|5|6|7|8|9)* (A|B|C|E|F|G|H|I|J|K|L|M|N|O|P|Q|R|S|T|U|V|W|X|Y|Z|a|b|c|d|e|f|g|h|i|j|k|1|m|n|o|p|q|r|s|t|u|v|w|x|y|z|_)*$

CONVERT

DFA: https://cyberzhg.github.io/toolbox/nfa2dfa?regex=KEF8QnxDfEV8RnxHfEh8SXxKfEt8THxNfE58T3xQfFF8UnxTfFR8VXxWfFd8WHxZfFp8YXxifGN8ZHxlfGZ8Z3xofGl8anxrfGx8bXxufG98cHxxfHJ8c3x0fHV8dnx3fHh8eXx6fF8pKg== (https://cyberzhg.github.io/toolbox/nfa2dfa?regex=KEF8QnxDfEV8RnxHfEh8SXxKfEt8THxNfE58T3xQfFF8UnxTfFR8VXxWfFd8WHxZfFp8YXxifGN8ZHxlfGZ8Z3xofGl8anxrfGx8bXxufG98cHxxfHJ8c3x0fHV8dnx3fHh8eXx6fF8pKygwfDF8MnwzfDR8NXw2fDd8OHw5KSogKEF8QnxDfEV8RnxHfEh8SXxKfEt8THxNfE58T3xQfFF8UnxTfFR8VXxWfFd8WHxZfFp8YXxifGN8ZHxlfGZ8Z3xofGl8anxrfGx8bXxufG98cHxxfHJ8c3x0fHV8dnx3fHh8eXx6fF8pKygwfDF8MnwzfDR8NXw2fDd8OHw5KSogKEF8QnxDfEV8RnxHfEh8SXxKfEt8THxNfE58T3xQfFF8UnxTfFR8VXxWfFd8WHxZfFp8YXxifGN8ZHxlfGZ8Z3xofGl8anxrfGx8bXxufG98cHxxfHJ8c3x0fHV8dnx3fHh8eXx6fF8pKg==)				
DFA STATE	Min-DFA STATE	TYPE	0,1,2,3,4,5,6,7,8,9 A,B,C,E,	,F,G,H,I,J,K,L,M,N,O,P,Q,R,S,T,U,V,W,X,Y,Z,_,a,b,c,d,e,f,g,h,i,j,k,l,m,n,o,p,q,r,s,t,u,v,w,x,y
{A}	1		2	
$\{AA,AB,AC,AD,AE,AF,AG,AH,AI,AJ,AK,AL,AM,AN,AO,AP,AQ,AR,AS,AT,AU,AV,AW,AX,AY,AZ,B,BA,BM,BN,BO,BP,BQ,BR,BS,BT,BU,BV,BW,BX,PY,BZ,C,CA,CB,CC,CD,CE,CF,CG,CH,CI,CJ,CK,CL,CM,CN,CO,CP,CQ,CR,CS,CT,CU,CV,CW,CX,CY,CZ,D,DA,DB,DC,DD,DE,DF,DG,DH,DI,DJ,DK,DL,E,F,G,H,I,J,K,L,M,N,O,P,Q,R,S,T,U,V,W,X,Y,Z\}$	2	3	4 2	
{BB,DM,DN,DO,DP,DQ,DR,DS,DT,DU,DV,DW,DX,DY,DZ,EA,EB,EC,ED,EE,EF,EG,EH,EI,EJ,EK,EL,EM,EN,EO,EP,EQ,ER,ES,ET,EU,EV,EW,EX,EY,EZ,FA,FB,FC,FD,FE,FF,FG,FH,FI,FJ,FK,FL}	3	accept	3	
{BC,BD,BE,BF,BG,BH,BI,BJ,BK,BL}	4	3	4	

Examples

• (a|b)* • (a*|b*)*

• ((∈|a)b*)*

• (a|b)*abb(a|b)*

0,1,2,3,4,5,6,7,8,9 $A,B,C,E,F,G,H,I,J,K,L,M,N,O,P,Q,R,S,T,U,V,W,X,Y,Z,_a,b,c,d,e,f,g,h,i,j,k,l,m,n,o,p,q,r,s,t,u,v,w,x,y,z,h,c,d,e,f,g,h,i,j,k,l,m,n,o,p,q,r,s,t,u,v,w,x,y,z,h,c,d,e,f,g,h,i,j,k,l,m,n,o,p,q,r,s,t,u,v,w,x,y,z,h,c,d,e,f,g,h,i,j,k,l,m,n,o,p,q,r,s,t,u,v,w,x,y,z,h,c,d,e,f,g,h,i,j,k,l,m,n,o,p,q,r,s,t,u,v,w,x,y,z,h,c,d,e,f,g,h,i,j,k,l,m,n,o,p,q,r,s,t,u,v,w,x,y,z,h,c,d,e,f,g,h,i,j,k,l,m,n,o,p,q,r,s,t,u,v,w,x,y,z,h,c,d,e,f,g,h,i,j,k,l,m,n,o,p,q,r,s,t,u,v,w,x,y,z,h,c,d,e,f,g,h,i,j,k,l,m,n,o,p,q,r,s,t,u,v,w,x,y,z,h,c,d,e,f,g,h,i,j,k,l,m,h,o,p,q,r,s,t,u,v,w,x,y,z,h,c,d,e,f,g,h,i,j,k,l,m,h,o,p,q,r,s,t,u,v,w,x,y,z,h,c,d,e,f,g,h,i,j,k,l,m,h,o,p,q,r,s,t,u,v,w,x,y,z,h,c,d,e,f,g,h,i,j,k,l,m,h,o,p,q,r,s,t,u,v,w,x,y,z,h,c,d,e,f,q,h,e,f,q,h$ 0,1,2,3,4,5,6,7,8,9