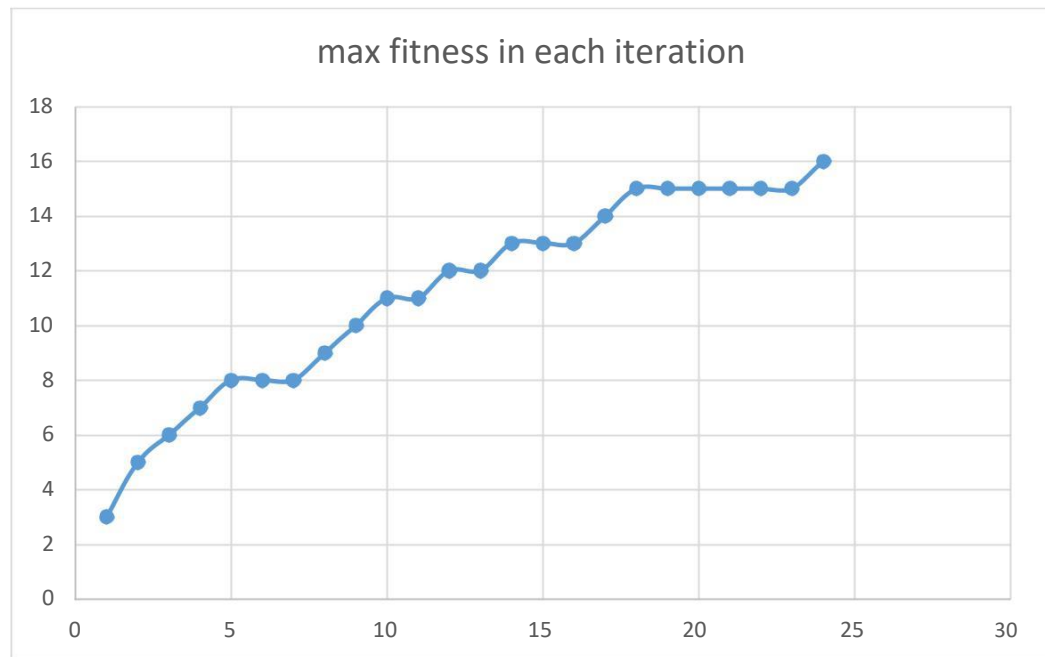


Scenario:

Size of population – 20;
Size of chromosome – 20;
Mutation percent – 0.01;
Multi -point crossover with 2 crossover random point;
Truncate selection mode;



Network:

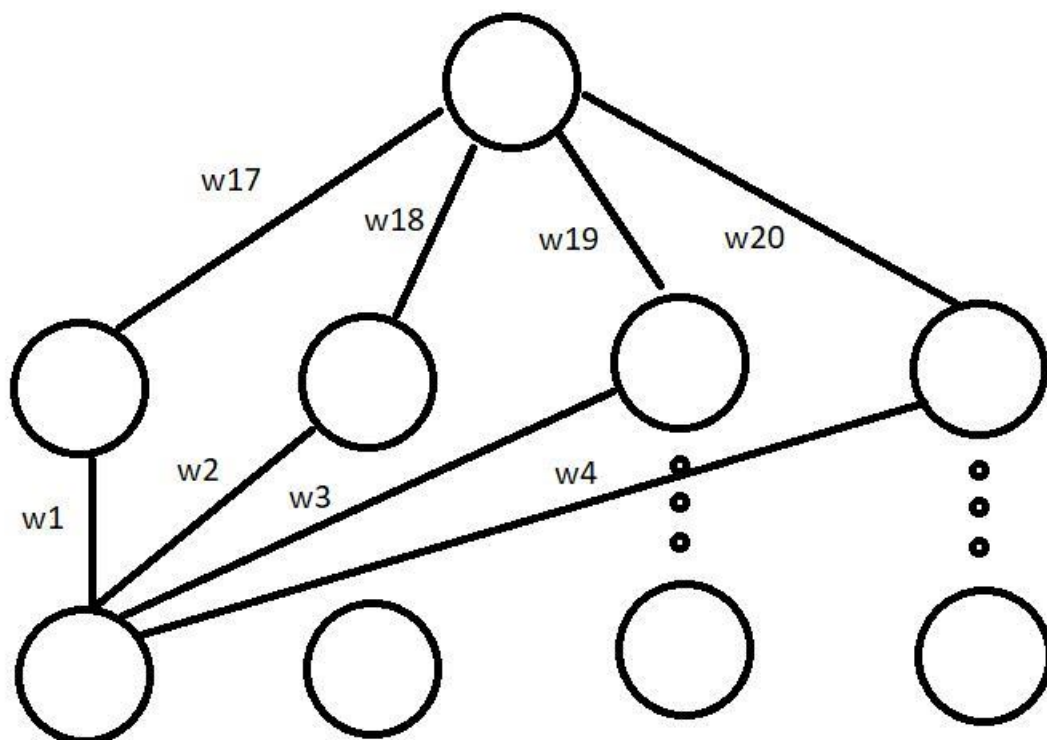
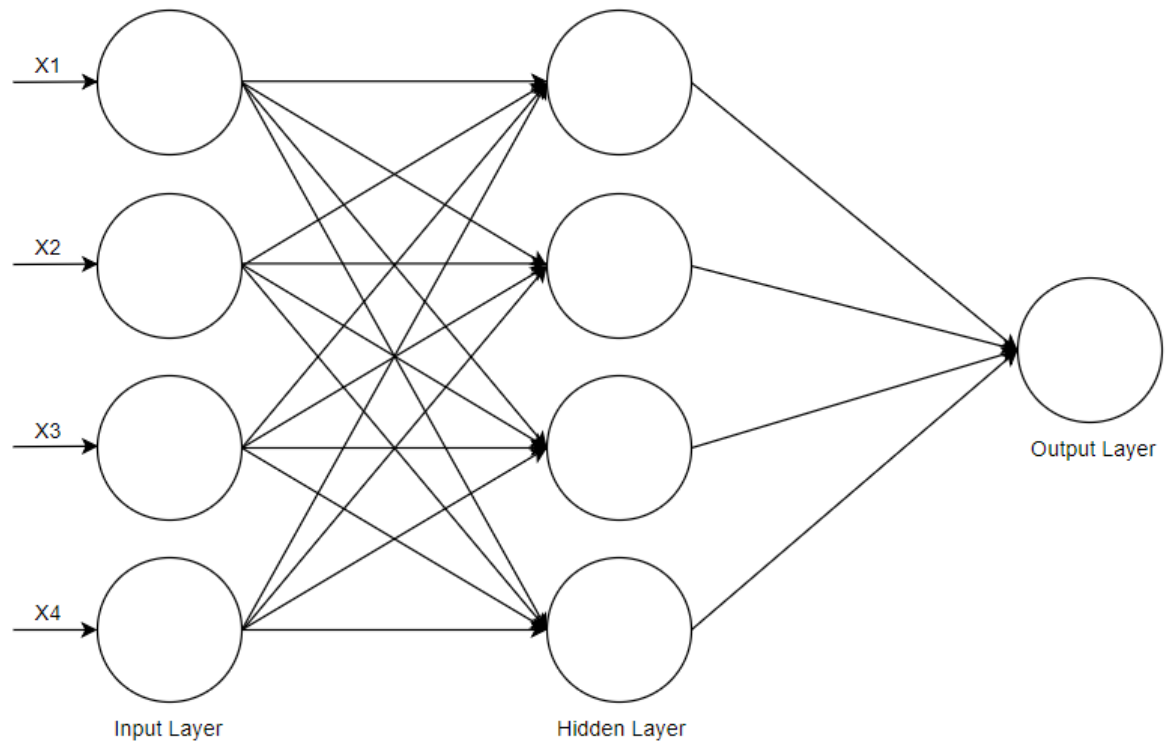
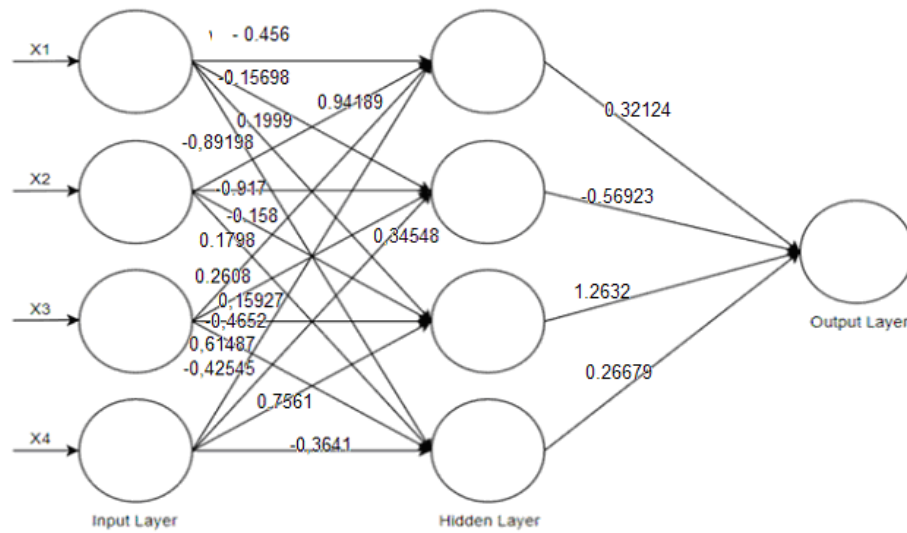


Table in first generation:

Table				Y	Y out	fitness
-1	-1	-1	-1	1	-1	
1	1	1	1	1	1	





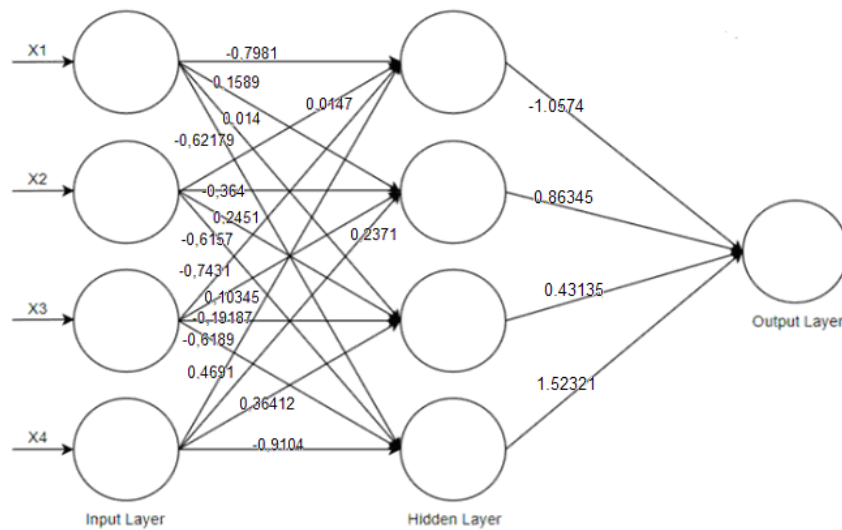
Conclusion : Algorithm achieved 100% accuracy (in my case). All cases, was matched by our NN (4-4-1). So, we can say that GA is aplicapable for training NN.

Network coefficients in first generation:

w1	0,456
w2	-0,15698
w3	0,1999
w4	-0,89198
w5	0,94189
w6	-0,917
w7	-0,158
w8	-0,1798
w9	0,2608
w10	0,15927
w11	-0,4652
w12	0,61487
w13	-0,42545
w14	0,34548
w15	0,7561
w16	-0,3641

Table in intermediate (12) generation:

Table				Y	Y out	fitness
-1	-1	-1	-1	1	1	12
-1	-1	-1	1	-1	1	
-1	-1	1	-1	-1	1	
-1	-1	1	1	1	-1	
-1	1	-1	-1	-1	-1	
-1	1	-1	1	1	1	
-1	1	1	-1	1	1	
-1	1	1	1	1	-1	
1	-1	-1	-1	-1	-1	
1	-1	-1	1	1	1	
1	-1	1	-1	1	1	
1	-1	1	1	1	-1	
1	1	-1	-1	1	1	
1	1	-1	1	-1	-1	
1	1	1	-1	1	-1	
1	1	1	1	-1	-1	
1	1	1	1	1	1	



Conclusion : Algorithm achieved 100% accuracy (in my case). All cases, was matched by our NN (4-4-1). So, we can say that GA is aplicapable for training NN.

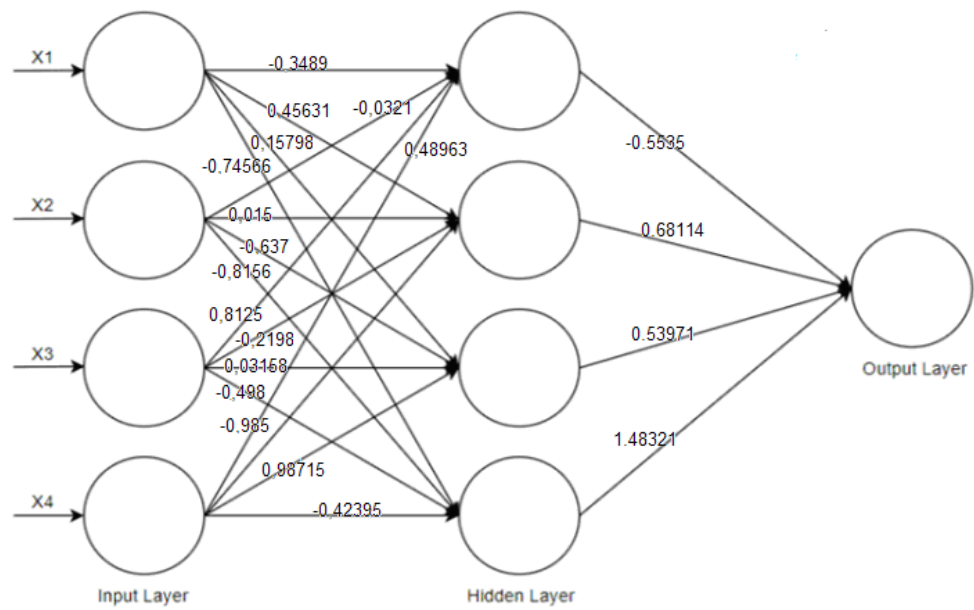
Network coefficients in intermediate (12) generation:

w1	-0,7981
w2	0,1589
w3	0,014
w4	-0,62179
w5	0,0147
w6	-0,364
w7	0,2451
w8	-0,6157
w9	-0,7431
w10	0,10345
w11	-0,19187

w12	-0,6189
w13	0,4691
w14	0,2371
w15	0,36412
w16	-0,9104

Table in last generation:

Table				Y	Y out	fitness
-1	-1	-1	-1	1	1	16
-1	-1	-1	1	-1	-1	
-1	-1	1	-1	-1	-1	
-1	-1	1	1	1	1	
-1	1	-1	-1	-1	-1	
-1	1	-1	1	1	1	
-1	1	1	-1	1	1	
-1	1	1	1	-1	-1	
1	-1	-1	-1	-1	-1	
1	-1	-1	1	1	1	
1	-1	1	-1	1	1	
1	-1	1	1	-1	-1	
1	1	-1	-1	1	1	
1	1	-1	1	-1	-1	
1	1	1	-1	1	-1	
1	1	1	1	-1	-1	
1	1	1	1	1	1	



Conclusion : Algorithm achieved 100% accuracy (in my case). All cases, was matched by our NN (4-4-1). So, we can say that GA is aplicapable for training NN.

Network coefficients in last generation:

w1	-0,3489
w2	0,45631
w3	0,15798
w4	-0,74566
w5	-0,0321
w6	0,015
w7	-0,637
w8	-0,8156
w9	0,8125
w10	-0,2198
w11	0,03158
w12	-0,498
w13	-0,985
w14	0,48963
w15	0,98715
w16	-0,42395