B) Topology	ActivationFcn	EndTrainFcn	PerformFcn	TrainFcn	TrainRatio	ValRatio	TestRatio	MeanTestAccuracy	MeanGlobalAccuracy	MeanEpochs	Run
[50 30]	logsig	softmax	mse	trainscg	0.8	0.1	0.1	84.44	97.11	55.67	4
[50 30]	logsig	softmax	crossentropy	trainseg	0.7	0.15	0.15	82.22	93.97	53.70	5
[50 30]	logsig	softmax	mse	trainscg	0.8	0.1	0.1	81.00	92.67	48.50	5
[50 30]	logsig	softmax	crossentropy	trainro	0.8	0.1	0.1	79.33	93.33	34.60	5
[40 30]	tansig	purelin	mse	trainscg	0.7	0.15	0.15	79.26	93.56	68.67	2
50	tansig	tansig	mse	trainlm	0.8	0.1	0.1	78.67			1
[50 30]	logsig	softmax	mse	trainscg	0.7	0.15	0.15	77.78	90.22	56.00	4
50	tansig	tansig	mse	trainseg	0.8	0.1	0.1	77.33	OULL	00.00	1
[50 30]	logsig	softmax	mse	trainrp	0.7	0.15	0.15	76.30	90.44	36.00	4
[20 10]	tansig	purelin	mse	trainsce	0.7	0.15	0.15	76.30	92.67	64.00	2
50	tansig	tansig	mse	trainlm	0.7	0.15	0.15	76.00	02.07	04.00	1
[40 20 10]	logsig	softmax	mse	trainscg	0.8	0.13	0.13	75.56	94.67	72.00	4
20	tansig	tansig	mse	trainIm	0.7	0.15	0.15	75.56	34.07	72.00	1
80	logsig	softmax	mse	trains	0.8	0.13	0.13	75.00	75.53	5000.00	5
[50 30]	logsig	softmax	crossentropy	trainrp	0.7	0.15	0.15	74.67	90.57	35.60	5
[40 20 10]		softmax	mse	trainrp	0.7	0.15	0.15	74.07	87.78	45.00	4
20	logsig tansig	tansig	mse	trainscg	0.7	0.15	0.15	73.33	07.70	45.00	1
[50 30]	logsig	softmax	mse	trainscg	0.7	0.15	0.15	72.00	87.00	46.00	5
[40 20 10]	logsig	softmax	mse	trainscg	0.7	0.15	0.15	71.85	88.56	58.00	4
[50 30]	logsig	softmax	mse	trainrp	0.8	0.15	0.15	71.67	83.07	34.20	5
[40 20 10]	logsig	softmax	crossentropy	trainrp	0.8	0.1	0.1	71.33	87.13	36.00	5
20	tansig	tansig	mse	trainlm	0.8	0.1	0.1	71.33	07.13	30.00	1
[40 20 10]	logsig	softmax	mse		0.8	0.15	0.15	71.33	86.87	36.00	5
[20 10]		purelin	mse	trainrp trainlm	0.7	0.15	0.15	71.11	92.22	14.33	2
50	tansig tansig		mse mse	trainscg	0.7	0.15	0.15	71.11	02.22	14.33	1
80		tansig softmax			0.7	0.15	0.15	71.11	69.43	5000.00	5
80	logsig	softmax softmax	mse mse	trains	0.7	0.15	0.15	70.89	69.43 84.57	51.00	5
	logsig			trainseg					64.57	51.00	
[20 10]	tansig	tansig	mse	trainlm	0.7	0.15	0.15	70.67	90.44	46.00	1
20	logsig	softmax	mse	trainrp	0.7	0.15	0.15	70.37 69.63	89.44 90.22	46.00 5.67	4
	tansig	purelin	mse	trainlm					90.22 89.44		2
[40 30] [50 30]	poslin	purelin	mse	trainlm	0.7	0.15	0.15	69.63 69.33	89.44	13.33	
	logsig	softmax	mse	trainrp	0.7		0.15			36.10	5
[40 20 10]	logsig	softmax	mse	trainscg	0.7	0.15	0.15	68.89	80.77	46.50	5
[40 30]	tansig	purelin	mse	trainlm	0.7	0.15	0.15	68.15	90.78	5.33	
80	logsig	softmax	mse	trainscg	0.7	0.15	0.15	67.41	78.00	39.67	4
[20 10]	poslin	purelin	mse	trainlm	0.7	0.15	0.15	67.41	87.78	13.00	2
[40 20 10]	logsig	softmax	mse	trainrp	0.8	0.1	0.1	67.33	89.27	41.80	5
[50 30]	logsig	softmax	mse	trains	0.7	0.15	0.15	66.89	69.87	5000.00	5
80	logsig	softmax	crossentropy	trainrp	0.8	0.1	0.1	66.67	80.63	28.20	5
[40 20 10]	logsig	softmax	crossentropy	trainrp	0.7	0.15	0.15	66.67	85.23	37.10	5
80	logsig	softmax	crossentropy	trainscg	0.8	0.1	0.1	66.33	80.30	50.70	5
20	tansig	tansig	mse	trainscg	8.0	0.1	0.1	66.00			1
50	tansig	purelin	mse	trainscg	0.7	0.15	0.15	65.93	87.44	39.33	2
80	logsig	softmax	crossentropy	trainscg	0.7	0.15	0.15	65.78	77.30	53.20	5
80	logsig	softmax	mse	trainscg	8.0	0.1	0.1	65.67	73.10	39.40	5
[20 10]	tansig	tansig	mse	trainlm	0.8	0.1	0.1	65.33			1
[50 30]	logsig	softmax	mse	trains	8.0	0.1	0.1	64.67	65.87	5000.00	5
[50 30]	logsig	softmax	crossentropy	trainscg	0.8	0.1	0.1	64.33	78.03	37.20	5
[40 20 10]	logsig	softmax	crossentropy	trainscg	0.7	0.15	0.15	63.78	74.27	46.20	5
50	poslin	purelin	mse	trainlm	0.7	0.15	0.15	63.70	89.33	7.00	2
[40 20 10]	logsig	softmax	mse	trainrp	8.0	0.1	0.1	63.33	81.00	36.00	4
50	purelin	purelin	mse	trainlm	8.0	0.1	0.1	63.33			1
50	purelin	purelin	mse	trainscg	8.0	0.1	0.1	63.33			1
[20 10]	tansig	tansig	mse	trainscg	8.0	0.1	0.1	63.33			1
[40 20 10]	logsig	softmax	crossentropy	trainscg	8.0	0.1	0.1	63.00	71.93	50.40	5
[40 20 10]	logsig	softmax	mse	trainscg	8.0	0.1	0.1	63.00	74.10	42.30	5
80	logsig	softmax	crossentropy	trains	8.0	0.1	0.1	62.67	63.60	5000.00	5
80	logsig	softmax	mse	trainrp	0.7	0.15	0.15	62.44	76.63	33.70	5
80	logsig	softmax	crossentropy	trains	0.7	0.15	0.15	62.00	63.53	5000.00	5
[20 10]	purelin	purelin	mse	trainlm	0.8	0.1	0.1	62.00			1
20	purelin	purelin	mse	trainlm	0.7	0.15	0.15	60.89			1
[20 10]	purelin	purelin	mse	trainlm	0.7	0.15	0.15	60.89			1
20	poslin	softmax	mse	trainlm	0.7	0.15	0.15	60.00	70.78	20.67	2
[50 30]	logsig	softmax	crossentropy	trains	0.8	0.1	0.1	59.33	55.20	5000.00	5
80	logsig	softmax	mse	trainscg	0.8	0.1	0.1	58.89	69.44	51.00	4
	purelin	purelin	mse	trainscg	0.7	0.15	0.15	58.52	67.22	55.33	3
30				trainlm	0.7	0.15	0.15	57.78	79.44	10.33	2
20	poslin	purelin	mse				0.15				2
		purelin purelin	mse mse	trainlm	0.7	0.15	0.15	57.78	88.11	4.00	4
20	poslin				0.7	0.15	0.15	57.78 56.00	88.11 67.50	4.00 22.90	5
20 50 80	poslin tansig logsig	purelin	mse	trainlm							
20 50 80	poslin tansig logsig logsig	purelin softmax	mse crossentropy	trainlm trainrp	0.7	0.15	0.15	56.00	67.50	22.90	5
20 50 80 [50 30]	poslin tansig logsig	purelin softmax softmax	mse crossentropy crossentropy	trainlm trainrp trains	0.7 0.7	0.15 0.15	0.15 0.15	56.00 53.78	67.50 52.10	22.90 5000.00	5 5
20 50 80 [50 30] 80 [10 20 10]	poslin tansig logsig togsig logsig purelin	purelin softmax softmax softmax purelin	mse crossentropy crossentropy mse mse	trainlm trainrp trains trainrp trainrp	0.7 0.7 0.8 0.8	0.15 0.15 0.1 0.1	0.15 0.15 0.1 0.1	56.00 53.78 53.33 53.33	67.50 52.10 66.44	22.90 5000.00 22.00	5 5 4 3
20 50 80 [50 30] 80 [10 20 10] 20	poslin tansig logsig logsig logsig purelin purelin	purelin softmax softmax softmax purelin purelin	mse crossentropy crossentropy mse	trainlm trainrp trains trainrp	0.7 0.7 0.8	0.15 0.15 0.1	0.15 0.15 0.1	56.00 53.78 53.33	67.50 52.10 66.44	22.90 5000.00 22.00	5 5 4
20 50 80 [50 30] 80 [10 20 10] 20	poslin tansig logsig logsig logsig purelin purelin purelin	purelin softmax softmax softmax purelin	mse crossentropy crossentropy mse mse mse	trainlm trainrp trains trainrp trainrp trainlm trainlm	0.7 0.7 0.8 0.8 0.8	0.15 0.15 0.1 0.1 0.1	0.15 0.15 0.1 0.1 0.1	56.00 53.78 53.33 53.33 52.00	67.50 52.10 66.44	22.90 5000.00 22.00	5 5 4 3 1
20 50 80 [50 30] 80 [10 20 10] 20 50	poslin tansig logsig logsig logsig purelin purelin purelin purelin	purelin softmax softmax softmax purelin purelin purelin purelin	mse crossentropy crossentropy mse mse mse mse mse mse	trainIm trainrp trains trainrp trainrp trainrp trainIm trainIm trainscg	0.7 0.8 0.8 0.8 0.7 0.7	0.15 0.15 0.1 0.1 0.1 0.1 0.15 0.15	0.15 0.15 0.1 0.1 0.1 0.1 0.15 0.15	56.00 53.78 53.33 53.33 52.00 52.00 52.00	67.50 52.10 66.44	22.90 5000.00 22.00	5 4 3 1 1
20 50 80 [50 30] 80 [10 20 10] 20 50 50 [20 20]	poslin tansig logsig logsig logsig purelin purelin purelin purelin purelin	purelin softmax softmax softmax purelin purelin purelin purelin purelin purelin	mse crossentropy crossentropy mse mse mse mse mse mse mse mse mse	trainlm trainrp trains trainrp trainrp trainlm trainlm trainscg trainscg	0.7 0.7 0.8 0.8 0.8 0.7 0.7	0.15 0.15 0.1 0.1 0.1 0.1 0.15 0.15 0.15	0.15 0.15 0.1 0.1 0.1 0.1 0.15 0.15 0.15	56.00 53.78 53.33 53.33 52.00 52.00 52.00 51.85	67.50 52.10 66.44 67.22	22.90 5000.00 22.00 97.67	5 5 4 3 1 1 1 3
20 50 80 [50 30] 80 [10 20 10] 20 50 50 [20 20] [40 20 10]	poslin tansig logsig logsig logsig purelin purelin purelin purelin purelin logsig	purelin softmax softmax softmax purelin purelin purelin purelin purelin softmax	mse crossentropy crossentropy mse mse mse mse mse mse mse mse mse	trainlm trainrp trains trainrp trainrp trainrp trainlm trainlm trainscg trainscg trainscg	0.7 0.7 0.8 0.8 0.8 0.7 0.7 0.7	0.15 0.1 0.1 0.1 0.1 0.1 0.15 0.15 0.15 0.15	0.15 0.15 0.1 0.1 0.1 0.1 0.15 0.15 0.15 0.15	56.00 53.78 53.33 53.33 52.00 52.00 52.00 51.85 50.33	67.50 52.10 66.44 67.22	22.90 5000.00 22.00 97.67	5 5 4 3 1 1 1 3 5
20 50 80 [50 30] 80 [10 20 10] 20 50 50 [20 20] [40 20 10] [20 10]	poslin tansig logsig logsig logsig puretin puretin puretin puretin puretin puretin togsig	purelin softmax softmax softmax purelin purelin purelin purelin purelin softmax tansig	mse crossentropy crossentropy mse	trainlm trainrp trains trainrp trainrp trainrp trainlm trainlm trainscg trainscg trainscg trainscg trainscg	0.7 0.8 0.8 0.8 0.7 0.7 0.7 0.7 0.8 0.7	0.15 0.15 0.1 0.1 0.1 0.1 0.15 0.15 0.15 0.15 0.15	0.15 0.15 0.1 0.1 0.1 0.1 0.15 0.15 0.15 0.15 0.15	56.00 53.78 53.33 52.00 52.00 52.00 51.85 50.33 49.78	67.50 52.10 66.44 67.22 49.56 49.47	22.90 5000.00 22.00 97.67 80.67 5000.00	5 5 4 3 1 1 1 3 5
20 50 80 [50 30] 80 [10 20 10] 20 50 50 [20 20] [40 20 10] [20 10]	poslin tansig logsig logsig logsig puretin puretin puretin puretin puretin togsig tansig tansig	purelin softmax softmax softmax purelin purelin purelin purelin purelin softmax tansig purelin	mse crossentropy crossentropy mse	trainIm trainrp trains trainrp trainrp trainlm trainIm trainscg trainscg trainscg trainscg trainscg trainscg trainscg	0.7 0.7 0.8 0.8 0.8 0.7 0.7 0.7 0.8 0.7	0.15 0.15 0.1 0.1 0.1 0.1 0.15 0.15 0.15 0.15 0.15 0.15	0.15 0.15 0.1 0.1 0.1 0.15 0.15 0.15 0.15 0.15 0.15 0.15	56.00 53.78 53.33 53.33 52.00 52.00 52.00 51.85 50.33 49.78 48.89	67.50 52.10 66.44 67.22 49.56 49.47	22.90 5000.00 22.00 97.67 80.67 5000.00	5 5 4 3 1 1 1 1 3 5
20 50 80 [50 30] 80 [10 20 10] 20 50 50 [20 20] [40 20 10] [20 10]	poslin tansig logsig logsig logsig puretin puretin puretin puretin puretin puretin togsig	purelin softmax softmax softmax purelin purelin purelin purelin purelin softmax tansig	mse crossentropy crossentropy mse	trainlm trainrp trains trainrp trainrp trainrp trainlm trainlm trainscg trainscg trainscg trainscg trainscg	0.7 0.8 0.8 0.8 0.7 0.7 0.7 0.7 0.8 0.7	0.15 0.15 0.1 0.1 0.1 0.1 0.15 0.15 0.15 0.15 0.15	0.15 0.15 0.1 0.1 0.1 0.1 0.15 0.15 0.15 0.15 0.15	56.00 53.78 53.33 52.00 52.00 52.00 51.85 50.33 49.78	67.50 52.10 66.44 67.22 49.56 49.47	22.90 5000.00 22.00 97.67 80.67 5000.00	5 5 4 3 1 1 1 3 5

A)					
NumLayers	NumNeurons	MeanAccuracy	Epochs	Run	
1	10	100	8	1	
1	20	100	6	1	
1	50	100	4	1	
2	[10 10]	100	15	1	
2	[20 10]	100	12	1	
2	[50 20]	100	5	1	
1	10	100	9	2	
1	20	100	5	2	
1	50	100	4	2	
2	[10 10]	100	18	2	
2	[20 10]	100	11	2	
2	[50 20]	100	5	2	

Ci)	
letID	GlobalAccuracy
l	88.33
2	83.33
3	80.00

GlobalAccuracy	TestAccuracy	StartSetAccuracy	TrainSetAccuracy	TestSetAccuracy	Epochs	Run
99.50	97.78	80.00	93.67	98.33	12.30	2
96.33	96.67	83.33	92.00	96.67	11.80	4
98.00	95.56	90.00	91.67	100.00	11.50	1
96.33	95.56	76.67	94.00	96.67	9.90	1
95.00	95.56	83.33	94.67	95.00	11.80	2
96.50	95.56	93.33	96.67	95.00	8.30	4
94.33	95.56	93.33	96.33	88.33	7.10	5
96.50	95.56	83.33	94.33	96.67	11.40	5
95.83	92.22	93.33	96.67	93.33	10.30	3
80.00	86.67	83.33	91.33	80.00	6.00	3
91.33	85.56	76.67	92.00	96.67	9.00	3
80.00	83.33	83.33	91.33	80.00	6.00	1
80.00	78.89	83.33	91.33	80.00	6.00	4
80.00	76.67	83.33	91.33	80.00	6.00	2
63.67	66.67	83.33	91.33	80.00	8.50	5
	99.50 96.33 96.00 96.33 96.33 96.50 96.50 94.33 96.50 95.83 80.00 90.00 80.00	99.50 97.78 96.33 96.67 96.30 95.56 96.33 95.56 96.30 95.56 96.50 95.56 94.33 95.56 94.33 95.56 94.50 95.56 94.50 95.56 94.50 95.56 95.83 92.22 80.00 86.67 91.33 85.56 80.00 83.33 80.00 78.89	99.50 97.78 80.00 96.33 96.67 83.33 96.67 83.33 98.00 95.56 90.00 98.33 95.56 76.67 95.00 95.56 93.33 94.33 95.56 93.33 94.33 95.56 83.33 94.33 95.56 83.33 94.30 95.56 83.33 94.31 95.56 83.33 95.83 92.22 93.33 80.00 86.67 83.33 91.33 85.56 76.67 80.00 83.33 83.33 80.00 78.89 83.33	99.50 97.78 80.00 93.67 96.33 96.67 83.33 92.00 98.00 95.56 90.00 91.67 98.33 95.56 76.67 94.00 95.50 95.56 83.33 94.67 96.50 95.56 93.33 96.67 94.33 95.56 93.33 96.37 94.33 95.56 83.33 96.37 94.30 95.56 83.33 96.33 95.50 95.56 93.33 96.33 95.50 95.56 93.33 96.33 95.50 95.56 95.33 96.67 94.33 95.56 83.33 91.33 95.83 92.22 93.33 96.67 90.00 86.67 83.33 91.33 91.33 91.33 90.00 78.89 83.33 91.33	99.50 97.78 80.00 93.67 98.33 96.67 83.33 92.00 96.67 83.33 92.00 96.67 83.33 92.00 96.67 98.00 91.67 100.00 98.33 95.56 90.00 91.67 100.00 96.67 95.00 95.56 83.33 94.67 95.00 95.56 93.33 96.67 95.00 95.56 83.33 96.67 95.00 96.50 95.56 83.33 96.33 88.33 94.33 96.50 95.56 93.33 96.33 88.33 94.33 96.67 95.00 96.67 97.00 96.67 97.00 96.67 97.00 96.67 97.00 96.67 97.00 96.67 97.00 96.67 97.00 96.67 97.00 96.67 97.00 96.67 97.00 97.89 83.33 91.33 80.00 97.89 83.33 91.33 80.00 97.667 83.33 91.33 80.00	99.50 97.78 80.00 93.67 98.33 12.30 96.33 96.67 83.33 92.00 96.67 11.80 98.00 95.56 90.00 91.67 100.00 11.50 98.33 95.56 76.67 94.00 96.67 99.00 95.50 95.56 83.33 94.67 95.00 11.80 96.50 95.56 93.33 96.67 95.00 83.0 94.33 95.56 93.33 96.67 95.00 13.00 96.50 95.56 93.33 96.67 95.00 13.00 96.50 95.56 93.33 96.67 95.00 83.0 94.33 95.56 93.33 96.33 88.33 7.10 96.50 95.56 93.33 96.67 95.00 60.00 95.56 95.00 95.56 95.00 95.56 95.00 95.56 95.00 95.56 95.00 95.56 95.00 95.56 95.00 95.56 95.00 95.56 95.00 95.56 95.33 96.67 95.00 96.67 95.00 95.56 95.00 95.56 95.00 95.56 95.33 96.67 95.33 96.67 95.33 95.00 95.56 95.33 95.33 96.67 95.33 95.33 95.33 95.33 95.33 95.00 96.67 95.00 95.56 95.00 95.56 95.00 95.56 95.33 95.33 95.33 95.00 96.67 95.00 95.56 95.00 95.56 95.00 95.56 95.00 95.56 95.00 95.56 95.00 95.56 95.00 95.56 95.00 95.57 95

CIII)							
NetID	GlobalAccuracy	TestAccuracy	StartSetAccuracy	TrainSetAccuracy	TestSetAccuracy	Epochs	Run
1	98.67	98.64	100.00	99.00	98.33	10.30	4
1	97.69	97.80	100.00	98.00	95.00	6.60	5
1	98.38	97.63	100.00	98.67	95.00	7.60	1
2	95.64	97.46	83.33	96.67	93.33	9.90	2
1	97.62	96.78	100.00	99.00	95.00	8.50	2
2	96.05	96.44	83.33	98.00	96.67	10.50	1
2	95.92	95.42	83.33	97.33	95.00	8.40	3
2	96.26	95.25	86.67	97.67	96.67	11.10	4
1	96.72	95.08	90.00	98.00	93.33	7.70	3
2	95.82	94.75	83.33	97.00	95.00	9.30	5
3	88.97	91.02	83.33	91.33	80.00	6.00	1
3	88.97	90.34	83.33	91.33	80.00	6.00	3
3	88.97	90.17	83.33	91.33	80.00	6.00	2
3	88.97	89.32	83.33	91.33	80.00	6.00	4
3	88.97	88.14	83.33	91.33	80.00	6.00	5

D)								
NetID	Accuracy	circle	kite	parallelogram	square	trapezoid	triangle	Run
1	66.67	80.00	20.00	60.00	100.00	40.00	100.00	2
2	60.00	80.00	0.00	80.00	100.00	0.00	100.00	2
1	53.33	40.00	0.00	20.00	100.00	80.00	80.00	1
2	50.00	80.00	0.00	20.00	80.00	60.00	60.00	1
3	40.00	20.00	20.00	20.00	40.00	40.00	100.00	1
3	40.00	40.00	20.00	40.00	20.00	40.00	80.00	2
1	33.33	40.00	20.00	20.00	40.00	20.00	60.00	3
2	20.00	40.00	20.00	20.00	0.00	0.00	40.00	3
3	16.67	40.00	20.00	20.00	0.00	0.00	20.00	3

BR1	circle	kite	parallelogram	square	trapezoid	triangle
circle	46	0	2	1	1	0
kite	0	48	0	0	0	2
parallelogram	0	0	50	0	0	0
square	0	0	0	50	0	0
trapezoid	0	0	2	1	47	0
triangle	0	0	0	0	0	50

BR2	circle         47         1           kite         0         47           allelogram         0         0           square         0         0		parallelogram	square	trapezoid	triangle
circle	47	1	0	2	0	0
kite	0	47	1	1	1	0
parallelogram	0	0	46	4	0	0
square	0	0	0	50	0	0
trapezoid	3	0	3	1	42	1

30 p 80 to 50 p											
50 to	tansig	softmax	mse	trainlm	0.7	0.15	0.15	47.41	58.67	22.67	2
80 lo	purelin	purelin	mse	trainscg	0.8	0.1	0.1	45.56	62.44	48.00	3
50 p	logsig	softmax	mse	trainrp	0.8	0.1	0.1	45.33	56.20	20.70	5
г											
	poslin	softmax	mse	trainlm	0.7	0.15	0.15	42.96	43.22	15.67	2
20 p	purelin	purelin	mse	trainscg	0.8	0.1	0.1	40.67			1
					0.7				44.70	F000 00	5
		softmax	mse	trains		0.15	0.15	40.00		5000.00	
[20 20] p	purelin	purelin	mse	trainscg	0.8	0.1	0.1	40.00	49.11	91.00	3
50 ta	tansig	softmax	mse	trainlm	0.7	0.15	0.15	39.26	49.78	24.00	2
	logsig	softmax	crossentropy	trains	0.7	0.15	0.15	38.67	38.03	5000.00	5
[50 30] lo	logsig	softmax	mse	trainrp	0.8	0.1	0.1	35.56	43.56	14.67	4
40 20 101 ld	logsig	softmax	crossentropy	trains	0.8	0.1	0.1	35.33	34.80	5000.00	5
	poslin	softmax	mse	trainlm	0.7	0.15	0.15	34.81	41.11	23.67	2
	tansig	softmax	mse	trainlm	0.7	0.15	0.15	32.59	33.67	13.67	2
[20 10] p	purelin	purelin	mse	trainscg	0.7	0.15	0.15	32.00			1
	poslin	softmax	mse	trainscg	0.7	0.15	0.15	31.11	26.44	25.67	2
[20 10] ta	tansig	softmax	mse	trainscg	0.7	0.15	0.15	30.37	26.56	16.00	2
[40 30] p	poslin	purelin	mse	trainscg	0.7	0.15	0.15	30.37	47.00	161.00	2
	purelin	purelin	mse	trainscg	0.7	0.15	0.15	28.89	35.89	81.33	3
20 p	poslin	purelin	mse	trainscg	0.7	0.15	0.15	28.15	29.33	32.33	2
20 101 p	purelin	purelin	mse	trainscg	0.8	0.1	0.1	28.00			1
	purelin	purelin	mse	trainscg	0.8	0.1	0.1	27.78	42.78	92.00	3
		•									
[20 10] p	poslin	softmax	mse	trainlm	0.7	0.15	0.15	25.93	40.78	15.33	2
30 p	poslin	softmax	crossentropy	trains	0.7	0.15	0.15	25.78	24.93	5000.00	5
					0.8			25.33			5
	poslin	softmax	crossentropy	trains		0.1	0.1		21.73	5000.00	
[40 20 10] p	poslin	softmax	mse	trains	0.8	0.1	0.1	25.00	21.43	5000.00	5
	poslin	poslin	mse	traingd	0.8	0.1	0.1	24.44	16.89	310.33	3
	poslin	poslin	mse	trainrp	0.7	0.15	0.15	24.44	16.67	3.33	3
[20 10] p	poslin	softmax	mse	trainscg	0.7	0.15	0.15	24.44	25.89	13.67	2
	poslin	softmax	mse	trains	0.8	0.1	0.1	24.33	23.30	5000.00	5
	poslin	softmax	crossentropy	trains	0.8	0.1	0.1	24.33	22.17	5000.00	5
[40 20 10] p	poslin	softmax	mse	trainrp	8.0	0.1	0.1	23.33	19.56	1.33	4
	poslin	softmax	crossentropy	trainrp	0.7	0.15	0.15	22.67	18.37	1.60	5
					0.7						
	poslin	softmax	mse	trainscg		0.1	0.1	22.22	21.44	15.67	4
[10 20 10] p	purelin	purelin	mse	trainrp	0.7	0.15	0.15	22.22	37.33	116.33	3
	poslin	poslin	mse	traingd	0.8	0.1	0.1	22.22	18.33	509.33	3
20 ta	tansig	softmax	mse	trainscg	0.7	0.15	0.15	22.22	26.00	17.33	2
50 p	poslin	purelin	mse	trainscg	0.7	0.15	0.15	22.22	43.00	69.00	2
	poslin	softmax	mse	trains	0.7	0.15	0.15	22.00	19.93	5000.00	5
	poslin	softmax	crossentropy	trainscg	0.8	0.1	0.1	22.00	18.53	13.40	5
[50 30] p	poslin	softmax	crossentropy	trainrp	0.7	0.15	0.15	21.78	19.77	1.60	5
	poslin	softmax	mse	trains	0.7	0.15	0.15	21.56	21.13	5000.00	5
[40 30] ta	tansig	softmax	mse	trainscg	0.7	0.15	0.15	21.48	20.11	11.33	2
50 30] p	poslin	softmax	crossentropy	trains	0.7	0.15	0.15	21.33	21.17	5000.00	5
	poslin	softmax	mse	trainrp	0.8	0.1	0.1	21.11	18.00	1.33	4
30 h	hardlim	hardlim	mse	trainrp	0.8	0.1	0.1	21.11	18.22	0.00	3
[10 20 10] p	poslin	poslin	mse	trainscg	0.8	0.1	0.1	21.11	16.89	18.33	3
	poslin	softmax	crossentropy	trains	0.7	0.15	0.15	20.89	20.67	5000.00	5
30 р	poslin	softmax	mse	trainrp	0.7	0.15	0.15	20.74	17.00	1.00	4
30 h	hardlim	hardlim	mse	trainscg	0.7	0.15	0.15	20.74	16.89	0.00	3
[10 20 10] p	poslin	poslin	mse	trainscg	0.7	0.15	0.15	20.74	17.00	22.33	3
[40 20 10] p	poslin	softmax	mse	trains	0.7	0.15	0.15	20.67	20.57	5000.00	5
30 p	poslin	softmax	crossentropy	trains	0.8	0.1	0.1	20.33	21.50	5000.00	5
					0.8	0.1	0.1	20.00	16.33	6.60	5
	poslin	softmax	crossentropy	trainscg							_
[50 30] p	poslin	softmax	mse	trainrp	0.7	0.15	0.15	20.00	17.33	1.67	4
30 p	purelin	purelin	mse	trainrp	0.8	0.1	0.1	20.00	27.56	133.67	3
	hardlim	hardlim		trainscg	0.8	0.1	0.1	20.00	17.56	0.00	3
			mse								
	hardlim	hardlim	mse	trainrp	8.0	0.1	0.1	20.00	20.22	0.00	3
[10 20 10] h	hardlim	hardlim	mse	trainscg	0.7	0.15	0.15	20.00	19.78	0.00	3
	hardlim	hardlim	mse	trainrp	0.7	0.15	0.15	20.00	18.44	0.00	3
	poslin	poslin	mse	trainrp	0.8	0.1	0.1	20.00	16.78	4.33	3
[50 30] p	poslin	softmax	mse	trainscg	0.7	0.15	0.15	19.26	15.44	7.67	4
30 h	hardlim	hardlim	mse	trainrp	0.7	0.15	0.15	19.26	16.78	0.00	3
	tansig	softmax	mse	trainscg	0.7	0.15	0.15	19.26	25.11	24.67	2
30 р	poslin	softmax	crossentropy	trainscg	0.7	0.15	0.15	18.67	19.17	7.90	5
	poslin	poslin	mse	trainscg	0.7	0.15	0.15	18.52	17.11	345.00	3
	poslin	poslin	mse	trainrp	0.7	0.15	0.15	18.52	16.67	3.33	3
30 р	poslin	softmax	crossentropy	trainscg	8.0	0.1	0.1	18.33	18.43	13.00	5
	poslin	softmax	crossentropy	trainrp	0.8	0.1	0.1	18.33	17.70	1.40	5
	poslin	softmax	crossentropy	trainscg	0.7	0.15	0.15	18.22	18.07	12.30	5
[50 30] p	poslin	softmax	mse	trainscg	0.7	0.15	0.15	18.22	17.87	12.30	5
	poslin	softmax	mse	trains	0.8	0.1	0.1	18.00	20.80	5000.00	5
	poslin	softmax	mse	trainscg	0.8	0.1	0.1	17.78	20.44	7.00	4
	purelin	purelin	mse	trainrp	8.0	0.1	0.1	17.78	25.89	117.33	3
	hardlim	hardlim	mse	traingd	0.7	0.15	0.15	17.78	16.44	0.00	3
[20 20] p											
[20 20] p [10 20 10] h		poslin	mse	traingd	0.7	0.15	0.15	17.78	17.78	553.67	3
[20 20] p [10 20 10] h [10 20 10] p		softmax	mse	trainscg	0.7	0.15	0.15	17.11	18.63	10.40	5
20 20] p 10 20 10] h 10 20 10] p	poslin		mse	trainrp	0.7	0.15	0.15	17.04	21.89	100.67	3
[20 20] p [10 20 10] h [10 20 10] p [80 p					0.7					10.33	
[20 20] p [10 20 10] h [10 20 10] p [30 p	purelin	purelin				0.15	0.15	17.04	16.89		3
[20 20] p [10 20 10] h [10 20 10] p [80 p [30 p	purelin poslin	poslin	mse	trainscg							
[20 20] p [10 20 10] h [10 20 10] p [80 p [30 p	purelin poslin		mse mse	trainscg trainrp							3
[20 20] p [10 20 10] h [10 20 10] p [80 p [80 p [80 p [80 p [80 p	purelin poslin purelin	poslin purelin	mse	trainrp	0.7	0.15	0.15	17.04	24.44	116.00	3
[20 20] p [10 20 10] h [10 20 10] p [80 p [30 p [30 p [20 20] p [20 20] p	purelin poslin purelin poslin	poslin purelin poslin	mse mse	trainrp traingd	0.7 0.7	0.15 0.15	0.15 0.15	17.04 17.04	24.44 17.33	116.00 172.67	3
[20 20] p [10 20 10] h [10 20 10] p [80 p [30 p [30 p [20 20] p [20 20] p	purelin poslin purelin	poslin purelin	mse	trainrp traingd trainscg	0.7	0.15	0.15	17.04	24.44	116.00	3
[20 20] p [10 20 10] h [10 20 10] p [30 p [30 p [30 p [20 20] p [20 20] p [40 30] p	purelin poslin purelin poslin	poslin purelin poslin	mse mse	trainrp traingd	0.7 0.7	0.15 0.15	0.15 0.15	17.04 17.04	24.44 17.33	116.00 172.67	3

triangle	0	1	2	0	1	46
BR3	circle	kite	parallelogram	square	trapezoid	triangle
circle	37	0	2	5	5	1
kite	0	43	3	1	1	2
parallelogram	0	2	31	11	1	5
square	0	8	3	37	2	0
trapezoid	3	3	5	5	34	0
triangle	3	7	9	1	1	29
BR4	circle	kite	parallelogram	square	trapezoid	triangle
circle	50	0	0	0	0	0
kite	0	49	0	0	0	1
parallelogram	0	1	47	1	0	1
square	0	0	0	50	0	0
trapezoid	0	0	2	0	48	0
triangle	0	0	1	1	0	48
BR5	circle	kite	parallelogram	square	trapezoid	triangle
circle	49	0	0	1	0	0
kite	0	49	1	0	0	0
parallelogram	0	0	46	3	1	0
square	0	0	0	50	0	0
trapezoid	1	0	2	1	46	0
triangle	0	2	0	0	0	48
1-CiiR4)	circle	kite	parallelogram	square	trapezoid	triangle
circle	65	0	0	0	0	0
kite	0	65	0	0	0	0
parallelogram	0	1	61	1	1	1
square	0	0	0	65	0	0
trapezoid	1	0	4	0	59	1
triangle	0	2	2	0	1	60
1-CiiiR4)	circle	kite	parallelogram	square	trapezoid	triangle
circle	65	0	0	0	0	0
kite	0	65	0	0	0	0
oarallelogram	0	0	63	1	0	1
square	0	0	0	65	0	0
trapezoid triangle	0	0	2	0	63	0
triangte	-					- 03
2-CiiR5)	circle	kite	parallelogram	square	trapezoid	triangle
circle	65	0	0	0	0	0
kite	0	64	0	0	0	1
oarallelogram	0	1	60	2	1	1
square	0	0	0	65	0	0
trapezoid	3	0	4	0	58	0
triangle	1	2	3	0	1	58
2-CiiiR5)	circle	kite	parallelogram	square	trapezoid	triangle
circle	65	0	0	0	0	0
kite	0	65	0	0	0	0
parallelogram	0	1	61	1	1	1
square	0	0	0	65	0	0
trapezoid	1	0	3	0	61	0
triangle	0	0	1	0	0	64
3-CiiR1)	circle	kite	parallelogram	square	trapezoid	triangle
circle	61	0	0	1	3	0
kite	0	63	0	0	0	2
parallelogram	0	0	52	5	7	1
square	1	0	0	62	2	0
trapezoid	0	0	2	0	63	0
triangle	1	0	1	1	1	61
		kite	parallelogram	square	trapezoid	triangle
	circle			0	0	0
3-CiiiR1)	circle 65	0	0			
3-CiiiR1) circle	65	0 65	0			0
3-CiiiR1) circle kite	65 0	65	0	0	0	0
3-CiiiR1) circle kite parallelogram	65 0 0	65 0	0 62	0 1	0 1	1
3-CiiiR1) circle kite	65 0	65	0	0	0	

[40 20 10]	poslin	softmax	mse	trainscg	0.7	0.15	0.15	16.67	19.30	9.90	5
[10 20 10]	hardlim	hardlim	mse	trainscg	0.8	0.1	0.1	16.67	17.78	0.00	3
[50 30]	poslin	softmax	crossentropy	trainrp	0.8	0.1	0.1	16.33	18.27	1.70	5
[40 20 10]	poslin	softmax	crossentropy	trainrp	0.8	0.1	0.1	16.33	17.37	1.70	5
[40 20 10]	poslin	softmax	mse	trainscg	0.7	0.15	0.15	16.30	19.00	19.67	4
30	purelin	purelin	mse	traingd	0.7	0.15	0.15	16.30	16.89	6.00	3
[20 20]	hardlim	hardlim	mse	trainrp	0.7	0.15	0.15	16.30	16.67	0.00	3
[20 10]	poslin	purelin	mse	trainscg	0.7	0.15	0.15	16.30	17.67	23.33	2
80	poslin	softmax	mse	trainrp	0.7	0.15	0.15	16.22	19.20	2.50	5
[50 30]	poslin	softmax	mse	trainrp	0.7	0.15	0.15	16.00	18.97	1.40	5
[40 20 10]	poslin	softmax	crossentropy	trainscg	0.7	0.15	0.15	16.00	19.83	12.70	5
[40 20 10]	poslin	softmax	mse	trainrp	0.8	0.1	0.1	16.00	17.63	1.60	5
80	poslin	softmax	mse	trainscg	0.8	0.1	0.1	15.67	19.53	13.00	5
[50 30]	poslin	softmax	mse	trainscg	0.8	0.1	0.1	15.56	18.22	7.00	4
30	poslin	poslin	mse	traingd	0.7	0.15	0.15	15.56	16.78	135.67	3
30	poslin	poslin	mse	traingd	0.8	0.1	0.1	15.56	16.89	301.67	3
30	poslin	poslin	mse	trainrp	0.7	0.15	0.15	15.56	16.67	3.00	3
[10 20 10]	hardlim	hardlim	mse	trainrp	0.8	0.1	0.1	15.56	15.33	0.00	3
[40 20 10]	poslin	softmax	mse	trainrp	0.7	0.15	0.15	15.33	17.60	1.80	5
[20 20]	purelin	purelin	mse	traingd	0.7	0.15	0.15	14.81	15.78	5.00	3
50	poslin	softmax	mse	trainscg	0.7	0.15	0.15	14.81	14.33	7.33	2
[40 20 10]	postin	softmax	crossentropy	trainrp	0.7	0.15	0.15	14.67	17.77	1.30	5
30	hardlim	hardlim	mse	traingd	0.8	0.13	0.13	14.44	17.89	0.00	3
[20 20]	hardlim	hardlim	mse	trainscg	0.8	0.1	0.1	14.44	14.89	0.00	3
[20 20]	poslin	poslin	mse	trainscg	0.8	0.1	0.1	14.44	17.00	12.67	3
30	hardlim	hardlim	mse	traingd	0.7	0.15	0.15	14.07	15.56	0.00	3
80	poslin	softmax	mse	trainro	0.7	0.15	0.15	13.33	15.47	1.60	5
80	poslin	softmax	mse	trainrp	0.8	0.1	0.1	13.33	18.22	1.00	4
30	purelin	purelin		traingd	0.8	0.1	0.1	13.33	17.67	6.00	3
30	poslin		mse mse		0.8	0.1	0.1	13.33	16.11	12.67	3
[20 20]	hardlim	poslin hardlim		trainseg	0.8	0.15	0.15	13.33	14.33	0.00	3
			mse	traingd		0.15	0.15	13.33	17.78	0.00	3
[20 20]	hardlim	hardlim	mse	traingd	0.8	0.1	0.1				3
[20 20]	poslin	poslin	mse	trainrp				13.33	16.56	3.00	
[10 20 10]	hardlim	hardlim	mse	traingd	0.8	0.1	0.1	13.33	14.33	0.00	5
[40 20 10]	poslin	softmax	mse	trainscg	0.8	0.1	0.1	12.67	16.97	9.30	
30	poslin	poslin	mse	trainrp	0.8	0.1	0.1	12.22	16.67	2.00	3
[20 20]	purelin	purelin	mse	traingd	0.8	0.1	0.1	12.22	15.89	5.00	3
80	poslin	softmax	mse	trainscg	0.7	0.15	0.15	11.85	14.78	11.00	4
[20 20]	hardlim	hardlim	mse	trainscg	0.7	0.15	0.15	11.85	16.89	0.00	3
[10 20 10]	purelin	purelin	mse	traingd	0.8	0.1	0.1	11.11	16.89	4.00	3
[40 20 10]	poslin	softmax	mse	trainrp	0.7	0.15	0.15	10.37	16.67	1.33	4
[10 20 10]	purelin	purelin	mse	traingd	0.7	0.15	0.15	8.89	16.78	4.00	3