Zaharov Alexey AC-33 ___Classification task

Setosa				Versicolor				Virginica			
x_1	x_2	x_3	x_4	x_1	x_2	x_3	x_4	x_1	x_2	x_3	x_4
0.63	0.80	0.19	0.12	0.70	0.59	0.64	0.48	0.85	0.70	0.81	0.96
0.57	0.52	0.19	0.12	0.77	0.68	0.67	0.56	0.87	0.70	0.74	0.92
0.56	0.73	0.19	0.08	0.73	0.59	0.58	0.48	0.73	0.61	0.74	0.76
0.63	0.80	0.23	0.24	0.63	0.52	0.48	0.40	0.86	0.73	0.86	0.92
0.65	0.86	0.28	0.16	0.71	0.61	0.61	0.52	0.85	0.75	0.83	1.00
0.61	0.68	0.20	0.12	0.72	0.68	0.61	0.48	0.85	0.68	0.75	0.92
0.65	0.86	0.23	0.08	0.72	0.66	0.61	0.52	0.80	0.57	0.72	0.76
0.58	0.73	0.20	0.08	0.78	0.66	0.62	0.52	0.82	0.68	0.75	0.80
0.67	0.84	0.22	0.08	0.65	0.57	0.43	0.44	0.78	0.77	0.78	0.92
0.63	0.75	0.20	0.08	0.72	0.64	0.59	0.52	0.75	0.68	0.74	0.72
0.62	0.70	0.22	0.04	0.80	0.52	0.64	0.52	0.81	0.70	0.80	0.72
0.56	0.68	0.19	0.08	0.71	0.68	0.59	0.52	0.76	0.68	0.70	0.72
0.65	0.77	0.22	0.08	0.70	0.57	0.58	0.52	0.87	0.70	0.78	0.84
0.63	0.80	0.19	0.12	0.70	0.59	0.64	0.48	0.85	0.70	0.81	0.96
0.57	0.52	0.19	0.12	0.77	0.68	0.67	0.56	0.87	0.70	0.74	0.92
0.56	0.73	0.19	0.08	0.73	0.59	0.58	0.48	0.73	0.61	0.74	0.76
0.63	0.80	0.23	0.24	0.63	0.52	0.48	0.40	0.86	0.73	0.86	0.92
0.65	0.86	0.28	0.16	0.71	0.61	0.61	0.52	0.85	0.75	0.83	1.00
0.61	0.68	0.20	0.12	0.72	0.68	0.61	0.48	0.85	0.68	0.75	0.92
0.65	0.86	0.23	0.08	0.72	0.66	0.61	0.52	0.80	0.57	0.72	0.76
0.58	0.73	0.20	0.08	0.78	0.66	0.62	0.52	0.82	0.68	0.75	0.80
0.67	0.84	0.22	0.08	0.65	0.57	0.43	0.44	0.78	0.77	0.78	0.92
0.63	0.75	0.20	0.08	0.72	0.64	0.59	0.52	0.75	0.68	0.74	0.72

Class: 1 – Setosa

Class: 2 – Versicolor

Class: 3 – Virginica

Class: 0 – Nothing Classification

Our Rules Are:

If (x1>0,65 and x1<0,73) and (x2>0,66 and x2<1) and (x3>0,14 and x3<0,28) and (x4>0,04 and x4<0,24) Then Setosa

If (x1>0,62 and x1<0,89) and (x2>0,45 and x2<0,77) and (x3>0,43 and x3<0,74) and (x4>0,4 and x4<0,72) Then Versicolor

If (x1>0,62 and x1<1) and (x2>0,5 and x2<0,86) and (x3>0,65 and x3<1) and (x4>0,48 and x4<1) Then Verginica

Result:

x1	x2	x3	x4	Class
0.63	0.8	0.19	0.12	1
0.57	0.52	0.19	0.12	0
0.56	0.73	0.19	0.08	0
0.63	0.8	0.23	0.24	1
0.65	0.86	0.28	0.16	1
0.61	0.68	0.2	0.12	1
0.65	0.86	0.23	0.08	1
0.58	0.73	0.2	0.08	0
0.67	0.84	0.22	0.08	0
0.63	0.75	0.2	0.08	1
0.62	0.7	0.22	0.04	1
0.56	0.68	0.19	0.08	0
0.65	0.77	0.22	0.08	1
0.63	0.8	0.19	0.12	1
0.57	0.52	0.19	0.12	0
0.56	0.73	0.19	0.08	0
0.63	0.8	0.23	0.24	1
0.65	0.86	0.28	0.16	1
0.61	0.68	0.2	0.12	1
0.65	0.86	0.23	0.08	1
0.58	0.73	0.2	0.08	0
0.67	0.84	0.22	0.08	0
0.63	0.75	0.2	0.08	1
0.7	0.59	0.64	0.48	2
0.77	0.68	0.67	0.56	2
0.73	0.59	0.58	0.48	2
0.63	0.52	0.48	0.4	0
0.71	0.61	0.61	0.52	2
0.72	0.68	0.61	0.48	2
0.72	0.66	0.61	0.52	2
0.78	0.66	0.62	0.52	2
0.65	0.57	0.43	0.44	0
0.72	0.64	0.59	0.52	2
0.8	0.52	0.64	0.52	0
0.71	0.68	0.59	0.52	2
0.7	0.57	0.58	0.52	2
0.7	0.59	0.64	0.48	2
0.77	0.68	0.67	0.56	2
0.73	0.59	0.58	0.48	2
0.63	0.52	0.48	0.4	0
0.71	0.61	0.61	0.52	2
0.72	0.68	0.61	0.48	2
0.72	0.66	0.61	0.52	2
0.78	0.66	0.62	0.52	2
0.65	0.57	0.43	0.44	0
0.72	0.64	0.59	0.52	2
0.85	0.7	0.81	0.96	3
0.87	0.7	0.74	0.92	0
0.73	0.61	0.74	0.76	3
0.86	0.73	0.86	0.92	0
0.85	0.75	0.83	1.0	3
0.85	0.68	0.75	0.92	3
0.8	0.57	0.72	0.76	3
0.82	0.68	0.75	0.8	3
0.78	0.77	0.78	0.92	3

0.75	0.68	0.74	0.72	3
0.81	0.7	0.8	0.72	3
0.76	0.68	0.7	0.72	3
0.87	0.7	0.78	0.84	0
0.85	0.7	0.81	0.96	3
0.87	0.7	0.74	0.92	0
0.73	0.61	0.74	0.76	3
0.86	0.73	0.86	0.92	0
0.85	0.75	0.83	1.0	3
0.85	0.68	0.75	0.92	3
0.8	0.57	0.72	0.76	3
0.82	0.68	0.75	0.8	3
0.78	0.77	0.78	0.92	3
0.75	0.68	0.74	0.72	3

True percent: 69%

Bad percent: 31%