

**PERCEPTRON E.****FREDDY LEONARDO ABAD LEON**

					Datos Iniciales				
x1	x2	x3	x4	Label	w1	w2	w3	w4	
5.1	3.5	1.4	0.2	Iris-setosa		1	2	3	4
4.9	3	1.4	0.2	Iris-setosa		6.1	5.5	4.4	4.2
4.7	3.2	1.3	0.2	Iris-setosa		3.65	4	3.7	4.1
4.6	3.1	1.5	0.2	Iris-setosa		8.35	7.2	5	4.3
5	3.6	1.4	0.2	Iris-setosa		6.05	5.65	4.25	4.2
5.4	3.9	1.7	0.4	Iris-setosa		11.05	9.25	5.65	4.4
4.6	3.4	1.4	0.3	Iris-setosa		8.35	7.3	4.8	4.2
5	3.4	1.5	0.2	Iris-setosa		12.95	10.7	6.2	4.5
4.4	2.9	1.4	0.2	Iris-setosa		10.45	9	5.45	4.4
4.9	3.1	1.5	0.1	Iris-setosa		14.85	11.9	6.85	4.6
5.4	3.7	1.5	0.2	Iris-setosa		12.4	10.35	6.1	4.55
4.8	3.4	1.6	0.2	Iris-setosa		17.8	14.05	7.6	4.75
4.8	3	1.4	0.1	Iris-setosa		15.4	12.35	6.8	4.65
4.3	3	1.1	0.1	Iris-setosa		20.2	15.35	8.2	4.75
5.8	4	1.2	0.2	Iris-setosa		18.05	13.85	7.65	4.7
5.7	4.4	1.5	0.4	Iris-setosa		23.85	17.85	8.85	4.9
5.4	3.9	1.3	0.4	Iris-setosa		21	15.65	8.1	4.7
5.1	3.5	1.4	0.3	Iris-setosa		26.4	19.55	9.4	5.1
5.7	3.8	1.7	0.3	Iris-setosa		23.85	17.8	8.7	4.95
5.1	3.8	1.5	0.3	Iris-setosa		29.55	21.6	10.4	5.25
5.4	3.4	1.7	0.2	Iris-setosa		27	19.7	9.65	5.1
5.1	3.7	1.5	0.4	Iris-setosa		32.4	23.1	11.35	5.3
4.6	3.6	1	0.2	Iris-setosa		29.85	21.25	10.6	5.1
5.1	3.3	1.7	0.5	Iris-setosa		34.45	24.85	11.6	5.3
4.8	3.4	1.9	0.2	Iris-setosa		31.9	23.2	10.75	5.05
5	3	1.6	0.2	Iris-setosa		36.7	26.6	12.65	5.25
5	3.4	1.6	0.4	Iris-setosa		34.2	25.1	11.85	5.15
5.2	3.5	1.5	0.2	Iris-setosa		39.2	28.5	13.45	5.55
5.2	3.4	1.4	0.2	Iris-setosa		36.6	26.75	12.7	5.45
4.7	3.2	1.6	0.2	Iris-setosa		41.8	30.15	14.1	5.65
4.8	3.1	1.6	0.2	Iris-setosa		39.45	28.55	13.3	5.55
5.4	3.4	1.5	0.4	Iris-setosa		44.25	31.65	14.9	5.75
5.2	4.1	1.5	0.1	Iris-setosa		41.55	29.95	14.15	5.55
5.5	4.2	1.4	0.2	Iris-setosa		46.75	34.05	15.65	5.65
4.9	3.1	1.5	0.1	Iris-setosa		44	31.95	14.95	5.55
5	3.2	1.2	0.2	Iris-setosa		48.9	35.05	16.45	5.65
5.5	3.5	1.3	0.2	Iris-setosa		46.4	33.45	15.85	5.55
4.9	3.1	1.5	0.1	Iris-setosa		51.9	36.95	17.15	5.75
4.4	3	1.3	0.2	Iris-setosa		49.45	35.4	16.4	5.7
5.1	3.4	1.5	0.2	Iris-setosa		53.85	38.4	17.7	5.9
5	3.5	1.3	0.3	Iris-setosa		51.3	36.7	16.95	5.8
4.5	2.3	1.3	0.3	Iris-setosa		56.3	40.2	18.25	6.1
4.4	3.2	1.3	0.2	Iris-setosa		54.05	39.05	17.6	5.95
5	3.5	1.6	0.6	Iris-setosa		58.45	42.25	18.9	6.15
5.1	3.8	1.9	0.4	Iris-setosa		55.95	40.5	18.1	5.85
4.8	3	1.4	0.3	Iris-setosa		61.05	44.3	20	6.25
5.1	3.8	1.6	0.2	Iris-setosa		58.65	42.8	19.3	6.1
4.6	3.2	1.4	0.2	Iris-setosa		63.75	46.6	20.9	6.3

5.3	3.7	1.5	0.2	Iris-setosa	61.45	45	20.2	6.2
5	3.3	1.4	0.2	Iris-setosa	66.75	48.7	21.7	6.4
7	3.2	4.7	1.4	Iris-versicolor	64.25	47.05	21	6.3
6.4	3.2	4.5	1.5	Iris-versicolor	71.25	50.25	25.7	7.7
6.9	3.1	4.9	1.5	Iris-versicolor	68.05	48.65	23.45	6.95
5.5	2.3	4	1.3	Iris-versicolor	74.95	51.75	28.35	8.45
6.5	2.8	4.6	1.5	Iris-versicolor	72.2	50.6	26.35	7.8
5.7	2.8	4.5	1.3	Iris-versicolor	78.7	53.4	30.95	9.3
6.3	3.3	4.7	1.6	Iris-versicolor	75.85	52	28.7	8.65
4.9	2.4	3.3	1	Iris-versicolor	82.15	55.3	33.4	10.25
6.6	2.9	4.6	1.3	Iris-versicolor	79.7	54.1	31.75	9.75
5.2	2.7	3.9	1.4	Iris-versicolor	86.3	57	36.35	11.05
5	2	3.5	1	Iris-versicolor	83.7	55.65	34.4	10.35
5.9	3	4.2	1.5	Iris-versicolor	88.7	57.65	37.9	11.35
6	2.2	4	1	Iris-versicolor	85.75	56.15	35.8	10.6
6.1	2.9	4.7	1.4	Iris-versicolor	91.75	58.35	39.8	11.6
5.6	2.9	3.6	1.3	Iris-versicolor	88.7	56.9	37.45	10.9
6.7	3.1	4.4	1.4	Iris-versicolor	94.3	59.8	41.05	12.2
5.6	3	4.5	1.5	Iris-versicolor	90.95	58.25	38.85	11.5
5.8	2.7	4.1	1	Iris-versicolor	96.55	61.25	43.35	13
6.2	2.2	4.5	1.5	Iris-versicolor	93.65	59.9	41.3	12.5
5.6	2.5	3.9	1.1	Iris-versicolor	99.85	62.1	45.8	14
5.9	3.2	4.8	1.8	Iris-versicolor	97.05	60.85	43.85	13.45
6.1	2.8	4	1.3	Iris-versicolor	102.95	64.05	48.65	15.25
6.3	2.5	4.9	1.5	Iris-versicolor	99.9	62.65	46.65	14.6
6.1	2.8	4.7	1.2	Iris-versicolor	106.2	65.15	51.55	16.1
6.4	2.9	4.3	1.3	Iris-versicolor	103.15	63.75	49.2	15.5
6.6	3	4.4	1.4	Iris-versicolor	109.55	66.65	53.5	16.8
6.8	2.8	4.8	1.4	Iris-versicolor	106.25	65.15	51.3	16.1
6.7	3	5	1.7	Iris-versicolor	113.05	67.95	56.1	17.5
6	2.9	4.5	1.5	Iris-versicolor	109.7	66.45	53.6	16.65
5.7	2.6	3.5	1	Iris-versicolor	115.7	69.35	58.1	18.15
5.5	2.4	3.8	1.1	Iris-versicolor	112.85	68.05	56.35	17.65
5.5	2.4	3.7	1	Iris-versicolor	118.35	70.45	60.15	18.75
5.8	2.7	3.9	1.2	Iris-versicolor	115.6	69.25	58.3	18.25
6	2.7	5.1	1.6	Iris-versicolor	121.4	71.95	62.2	19.45
5.4	3	4.5	1.5	Iris-versicolor	118.4	70.6	59.65	18.65
6	3.4	4.5	1.6	Iris-versicolor	123.8	73.6	64.15	20.15
6.7	3.1	4.7	1.5	Iris-versicolor	120.8	71.9	61.9	19.35
6.3	2.3	4.4	1.3	Iris-versicolor	127.5	75	66.6	20.85
5.6	3	4.1	1.3	Iris-versicolor	124.35	73.85	64.4	20.2
5.5	2.5	4	1.3	Iris-versicolor	129.95	76.85	68.5	21.5
5.5	2.6	4.4	1.2	Iris-versicolor	127.2	75.6	66.5	20.85
6.1	3	4.6	1.4	Iris-versicolor	132.7	78.2	70.9	22.05
5.8	2.6	4	1.2	Iris-versicolor	129.65	76.7	68.6	21.35
5	2.3	3.3	1	Iris-versicolor	135.45	79.3	72.6	22.55
5.6	2.7	4.2	1.3	Iris-versicolor	132.95	78.15	70.95	22.05
5.7	3	4.2	1.2	Iris-versicolor	138.55	80.85	75.15	23.35
5.7	2.9	4.2	1.3	Iris-versicolor	135.7	79.35	73.05	22.75
6.2	2.9	4.3	1.3	Iris-versicolor	141.4	82.25	77.25	24.05
5.1	2.5	3	1.1	Iris-versicolor	138.3	80.8	75.1	23.4
5.7	2.8	4.1	1.3	Iris-versicolor	143.4	83.3	78.1	24.5

## JEMPLO PRACTICO

z	Eg	Er	
	17.1	1	2
	53.39	1	-1
	35.585	1	2
	69.09	1	-1
	57.38	1	2
	107.11	1	-1
	71.21	1	2
	111.33	1	-1
	80.59	1	2
	120.39	1	-1
	115.315	1	2
	146.32	1	-1
	120.955	1	2
	142.405	1	-1
	170.21	1	2
	229.72	1	-1
	186.845	1	2
	217.755	1	-1
	219.86	1	2
	249.96	1	-1
	230.205	1	2
	269.855	1	-1
	225.43	1	2
	280.07	1	-1
	253.435	1	2
	284.59	1	-1
	277.36	1	2
	324.875	1	-1
	300.14	1	2
	316.63	1	-1
	300.255	1	2
	371.21	1	-1
	360.635	1	2
	423.175	1	-1
	337.625	1	2
	377.53	1	-1
	393.99	1	2
	395.155	1	-1
	346.24	1	2
	432.925	1	-1
	408.725	1	2
	371.365	1	-1
	386.85	1	2
	474.055	1	-1
	475.975	1	2
	455.815	1	-1
	493.855	1	2
	472.89	1	-1

523.725	1	2
526.12	1	-1
707.83	1	2
744	1	-1
745.69	1	2
655.635	1	-1
743.89	1	2
749.475	1	-1
798.185	1	2
655.725	1	-1
841.635	1	2
759.895	1	-1
660.55	1	2
872.485	1	-1
791.83	1	2
932.19	1	-1
810.72	1	2
1014.89	1	-1
876.145	1	2
916.1	1	-1
917.01	1	2
908.43	1	-1
1002.005	1	2
1021.76	1	-1
1036.48	1	2
1091.845	1	-1
1076.745	1	2
1181.9	1	-1
1173.7	1	2
1271.535	1	-1
1117.08	1	2
1061.3	1	-1
1017.54	1	2
1061.31	1	-1
1106.725	1	2
1271.005	1	-1
1147.56	1	2
1313.955	1	-1
1352.205	1	2
1295.895	1	-1
1208.21	1	2
1208.8	1	-1
1213.78	1	2
1401.08	1	-1
1251.41	1	2
1121.77	1	-1
1282.18	1	2
1375.935	1	-1
1339.99	1	2
1478.645	1	-1
1158.37	1	2
1402.68	1	-1

123

A= 0.5  
E= -1

$W(k+1)=W(k)+(a \cdot E \cdot x(k))$

Formulas usadas