## تمرین دوم:

جدول زیر شامل داده های مربوط به دو کلاس کودکان <u>با عفونت</u> شانت و <u>بدون عفونت</u> شانت هستند تلاش کنید با استفاده از الگوریتم LDA دسته بندی را انجام دهید.

Birth.Wt	prematurity	trauma	meningitis	tumo r	IVH	icter	Co- Inf	ММС	first. VPS Age	Revision.no	Class
2000	yes	no	no	no	no	no	no	1	55	0	noninfected
3300	no	yes	no	no	no	no	no	2	268	0	noninfected
2760	no	no	no	no	no	no	no	1	68	1	noninfected
2000	yes	no	no	no	yes	no	no	2	66	1	noninfected
2900	no	no	no	no	no	no	no	1	33	0	noninfected
2000	yes	no	no	no	no	yes	no	2	99	0	noninfected
2240	yes	no	no	no	no	no	no	1	55	0	noninfected
3000	no	no	no	no	no	no	no	2	68	0	noninfected
3500	no	no	no	yes	no	no	no	2	2638	1	noninfected
3900	no	no	no	no	no	yes	no	1	175	4	noninfected
3500	no	no	no	no	no	no	no	1	26	2	noninfected
3500	yes	no	no	no	yes	no	no	2	117	2	noninfected
3400	no	no	no	no	no	no	no	2	25	3	noninfected
2750	no	no	no	no	no	no	no	1	10	1	noninfected
3800	no	no	no	no	no	no	no	2	127	1	noninfected
3500	no	no	no	yes	no	no	no	2	913	3	noninfected
3150	no	no	no	no	no	no	no	2	107	1	noninfected
3600	no	no	yes	no	no	no	yes	2	85	2	noninfected
3050	no	no	no	no	no	no	no	2	44	1	noninfected
2200	yes	no	no	no	yes	no	no	2	77	1	noninfected
3160	no	no	no	no	no	no	no	1	16	0	noninfected
3800	no	no	no	no	no	no	no	2	16	1	noninfected
2950	no	no	no	no	no	no	no	2	40	1	noninfected
3000	no	no	no	no	no	no	no	2	138	1	noninfected
3300	no	no	no	no	no	no	no	2	48	1	noninfected
2080	yes	no	no	no	yes	yes	no	2	67	1	noninfected
3000	no	no	no	no	no	no	no	2	49	1	noninfected
3000	no	no	no	no	no	no	no	2	128	1	noninfected
3150	no	no	no	no	no	no	no	1	37	1	noninfected
3300	no	no	no	no	no	no	no	1	28	0	noninfected
3650	no	no	no	no	no	no	no	1	30	0	noninfected
3200	no	no	no	no	no	no	no	2	56	1	noninfected
3060	no	no	no	no	no	no	no	1	66	0	noninfected

3800	no	2	79	1	noninfected						
3100	no	2	87	0	noninfected						
3250	no	2	58	1	noninfected						
1900	yes	no	no	no	yes	yes	no	2	74	0	noninfected
3600	no	2	75	1	noninfected						
3500	no	1	37	1	noninfected						
3300	no	1	66	1	noninfected						
3000	no	2	182	1	noninfected						
3100	no	1	26	0	noninfected						
3400	no	2	986	0	noninfected						
2600	no	2	63	2	noninfected						
2800	yes	no	no	no	yes	no	no	2	36	1	noninfected
3600	no	no	no	yes	no	no	no	2	308	0	noninfected
3500	no	2	30	2	noninfected						
1820	yes	no	no	no	yes	no	no	2	72	0	noninfected
3450	no	2	45	1	noninfected						
3070	no	1	30	0	noninfected						
3700	no	2	77	1	noninfected						
2800	no	1	26	0	noninfected						
3100	no	1	35	0	noninfected						
2950	no	1	39	1	noninfected						
3350	no	1	117	0	noninfected						
3400	no	1	41	1	noninfected						
3500	no	no	no	yes	no	no	no	2	1751	0	noninfected
3050	no	no	yes	no	no	no	yes	2	101	0	noninfected
2600	yes	no	no	no	yes	no	no	2	49	0	noninfected
3100	no	no	no	yes	no	no	no	2	57	1	noninfected
3160	no	2	153	0	noninfected						
2900	no	2	48	0	noninfected						
2300	yes	no	no	no	no	no	no	1	37	0	noninfected
2500	yes	no	no	no	yes	no	no	2	47	0	noninfected
3300	no	2	147	0	noninfected						
2800	no	no	yes	no	no	no	yes	2	101	0	noninfected
3200	no	1	29	0	noninfected						
3030	no	2	155	0	noninfected						
2860	no	2	91	0	noninfected						
3340	no	2	49	0	noninfected						
3090	no	2	38	0	noninfected						
2800	no	2	70	0	noninfected						
3400	no	2	97	0	noninfected						
3000	no	2	214	1	noninfected						
3100	no	2	96	0	noninfected						
2900	no	yes	no	no	no	no	no	2	68	0	noninfected

2400	yes	no	no	no	yes	no	no	2	25	0	noninfected
3000	no	no	no	no	no	no	no	2	73	0	noninfected
2940	no	no	no	no	no	no	no	1	34	0	noninfected
3400	no	no	no	no	no	no	no	2	70	0	noninfected
3400	no	no	no	no	no	yes	no	2	37	3	infected
1400	yes	no	yes	no	no	no	yes	2	7	1	infected
3300	no	no	no	no	no	yes	no	2	136	1	infected
2300	yes	no	no	no	no	no	no	2	523	1	infected
3000	no	no	no	no	no	no	no	2	140	0	infected
2300	yes	no	no	no	yes	no	no	2	140	1	infected
3000	no	no	no	no	no	no	no	2	140	0	infected
3500	no	no	no	no	no	no	no	2	6	1	infected
3000	yes	no	no	no	yes	no	no	2	4	2	infected
2000	yes	no	no	no	yes	no	no	2	37	1	infected
2900	no	no	no	no	no	no	no	2	136	3	infected
3000	no	no	no	no	no	no	no	2	15	1	infected
3000	no	no	no	no	no	no	no	2	45	1	infected
3000	yes	no	no	no	no	yes	no	2	75	1	infected
1730	yes	no	no	no	yes	yes	no	2	167	1	infected
3000	no	no	yes	no	no	no	yes	2	33	3	infected
3000	no	no	no	no	no	no	no	1	86	2	infected
3300	no	no	no	no	no	no	no	1	27	3	infected
2800	no	no	no	yes	no	no	no	2	495	1	infected
3000	no	no	no	no	no	no	no	2	4	2	infected
3000	no	no	no	no	no	no	no	1	1099	1	infected
2000	yes	no	no	no	no	no	no	2	416	1	infected
3480	yes	no	no	no	yes	no	no	2	21	4	infected
1950	yes	no	no	no	yes	yes	no	2	20	7	infected
3600	no	no	no	no	no	no	no	2	178	1	infected
3000	no	no	no	no	no	no	no	2	140	#NULL!	infected
1500	yes	no	no	no	yes	no	no	2	41	1	infected
2950	yes	no	no	no	no	no	no	1	63	1	infected
3000	no	no	no	no	no	no	yes	2	59	1	infected
3100	no	no	yes	no	no	no	yes	2	916	2	infected
1300	yes	no	no	no	no	no	no	2	364	5	infected
3000	no	no	no	no	no	no	no	2	80	1	infected
3500	no	no	no	no	no	no	no	1	14	1	infected
3250	no	no	no	no	yes	no	no	2	77	1	infected
3600	no	no	no	no	no	no	no	2	14	2	infected
3000	no	no	no	no	no	no	no	1	66	1	infected
3000	no	no	no	no	no	no	no	2	5	1	infected
1700	yes	no	no	no	no	no	no	2	135	2	infected
3200	no	no	no	no	no	no	no	2	64	1	infected

4000	no	no	no	no	no	no	no	2	15	1	infected
1760	yes	no	no	no	yes	no	no	2	55	1	infected
3900	no	no	no	no	no	yes	no	2	3	3	infected
3450	no	no	no	yes	no	no	no	2	325	1	infected
3000	no	no	no	no	no	no	no	2	28	1	infected
3000	yes	no	no	no	no	no	no	2	140	1	infected
3600	no	no	no	no	no	no	no	2	7	2	infected
3600	yes	no	no	no	yes	no	no	2	140	1	infected
1400	yes	no	no	no	yes	no	no	2	153	3	infected
1700	yes	no	no	no	yes	no	no	2	46	1	infected
3600	no	no	no	no	no	no	no	2	436	6	infected
3200	no	no	no	no	no	no	yes	2	17	2	infected
3000	no	no	no	no	no	no	no	1	140	1	infected
3000	no	no	no	yes	no	no	no	2	140	1	infected
3000	no	no	no	no	no	no	no	2	140	1	infected
3600	no	no	no	no	no	no	no	2	63	2	infected
3000	no	no	no	no	no	yes	no	2	140	2	infected
3000	no	no	no	no	no	no	no	2	140	#NULL!	infected
3100	no	no	no	no	no	no	no	2	255	2	infected
2200	yes	no	no	no	no	no	no	2	186	4	infected
2200	yes	no	no	no	no	no	yes	2	91	2	infected
3000	no	no	no	no	no	no	no	1	127	8	infected
2800	yes	no	no	no	no	yes	no	2	320	1	infected
1200	yes	no	no	no	yes	no	no	2	89	2	infected
3450	no	no	no	no	no	no	no	2	47	1	infected
1500	yes	no	no	no	no	yes	no	1	94	1	infected
3700	no	no	no	no	no	no	no	2	110	3	infected
3500	no	no	no	no	no	no	no	2	19	3	infected
1050	yes	no	no	no	no	no	no	2	64	1	infected