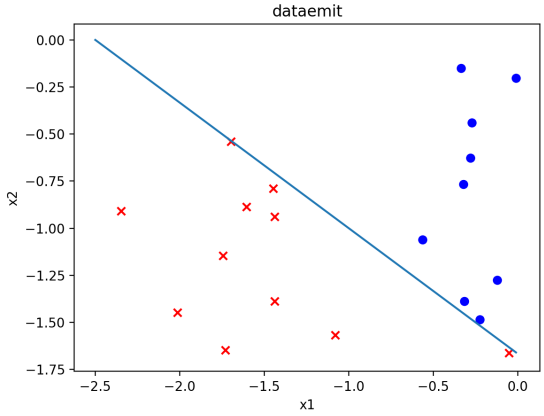
experiment report

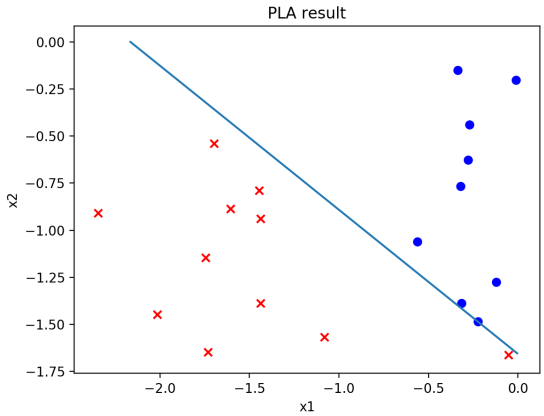
given experiments

training result:

1. DataEmit [5,2,3] 10 10

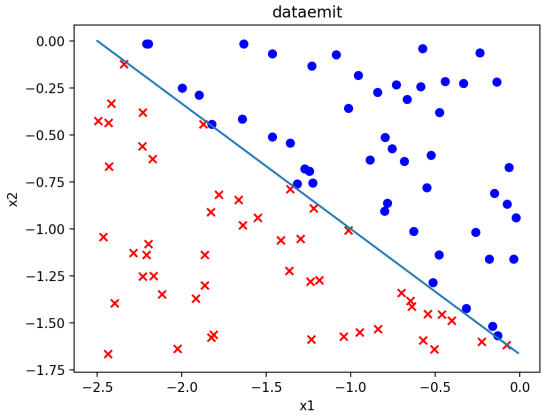
> weight: <4.653211307837301,2.149618366856361,2.8073294800277653>

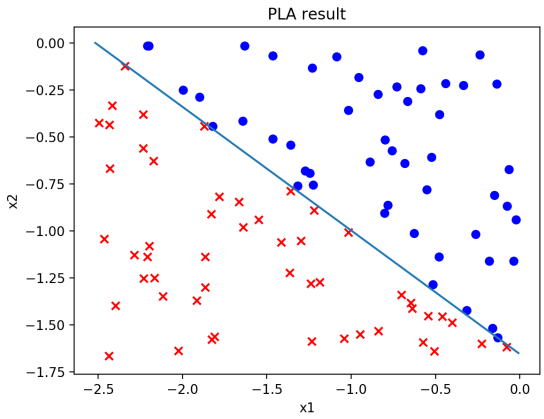




2. DataEmit [5,2,3] 50 50

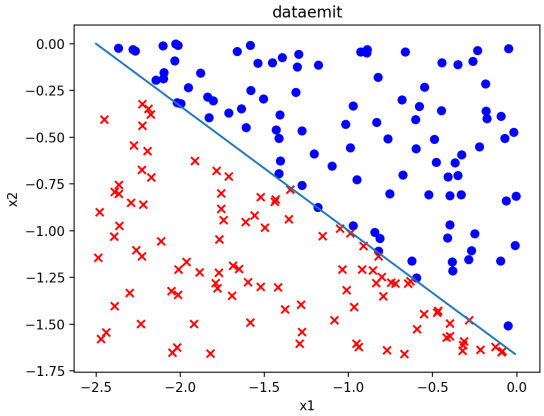
> weight: <25.358509234967887,10.072120539163073,15.328932577254589>

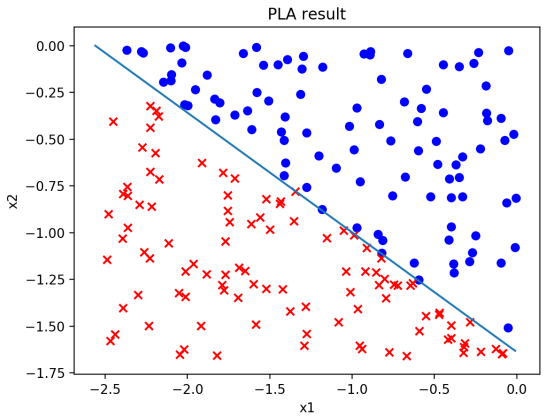




3. DataEmit [5,2,3] 100 100

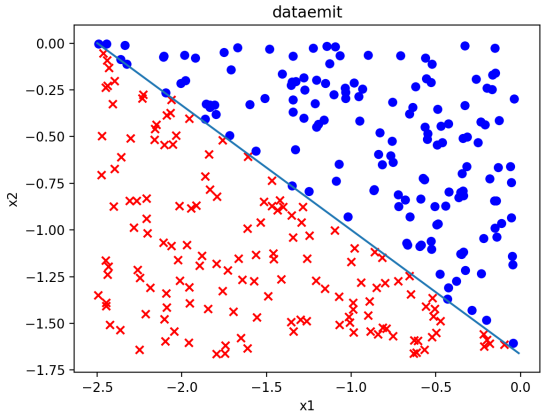
> weight: <42.42352957909652,16.575490424585375,25.892839740445616>

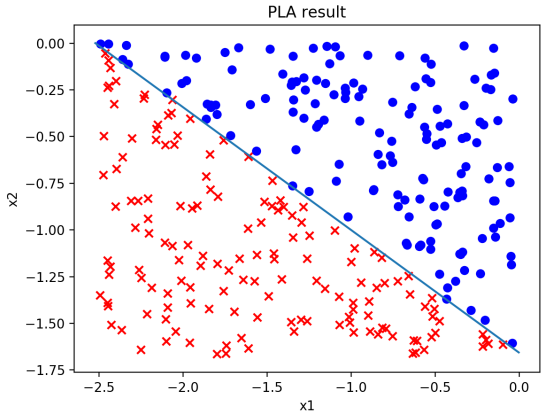




4. DataEmit [5,2,3] 150 150

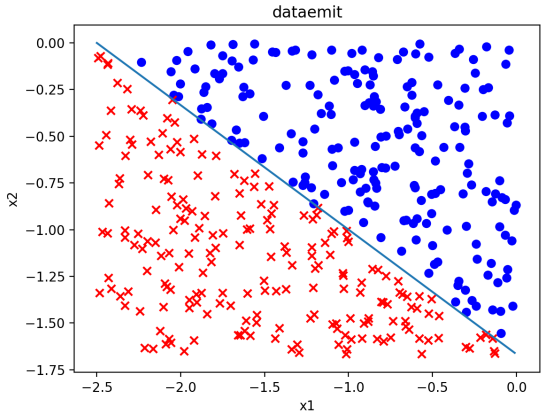
> weight: <23.303225158770395,9.240600808226029,14.06303494428334>

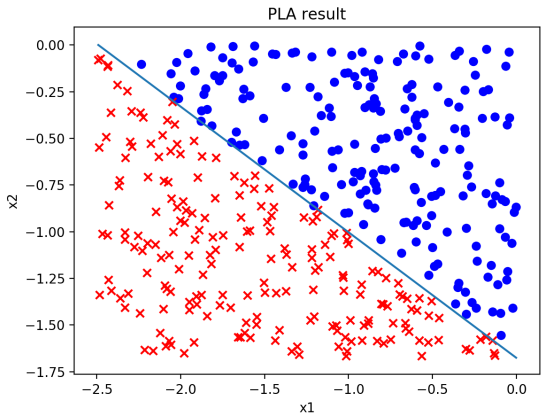




5. DataEmit [5,2,3] 200 200

> weight: <29.831461476290542,11.973959381399991,17.797151731114187>





Analyze

weight compare:

W	m/n	PLAresult: W_rate (diff)	totaldiff
5:2:3	10	5 : 2.31 (0.31) : 3.02(0.02)	0.33
5:2:3	50	5 : 1.99 (0.01) : 3.02(0.02)	0.03
5:2:3	100	5 : 1.95 (0.05) : 3.05(0.05)	0.10
5:2:3	150	5 : 1.98 (0.02) : 3.02(0.02)	0.04
5:2:3	200	5 : 2.01 (0.01) : 2.98(0.02)	0.03

With the size of data increasing, the output of the PLA will closer to the "line"

own experiments

Analyze:

weight compare:

label	W	m	n	m+n	PLAresult: W_rate (diff)	totaldiff
1	3:2:7	10	10	20	3 : 1.91 (0.09) : 6.43 (0.57)	0.66
2	3:2:7	50	50	100	3 : 2.00 (0.00) : 6.90 (0.10)	0.10

label	W	m	n	m+n	PLAresult: W_rate (diff)	totaldiff
3	3:2:7	100	100	200	3 : 2.00 (0.00) : 6.97 (0.03)	0.03
4	3:2:7	200	200	400	3 : 2.00 (0.00) : 7.06 (0.06)	0.06
5	3:2:7	90	110	200	3 : 2.01 (0.01) : 7.00 (0.00)	0.01
6	3:2:7	70	130	200	3 : 2.01 (0.01) : 7.02 (0.02)	0.03
7	3:2:7	50	150	200	3 : 2.00 (0.00) : 7.02 (0.02)	0.02

1. With the size of data increasing, the output of the PLA will closer to the "line"(from label 1,2,3,4)
2. When m+n is big enough the balance has little effect to the output of PLA (from label 5,6,7)