

Light FM SMALL(1%)

Max_iteration	Reg_para	Ranks	time	PrecisionAt100
5	0.01	100	4.240825415	0.07999999821
10	0.01	100	5.035381317	0.1285384595
15	0.01	100	8.450325251	0.1473077089
20	0.01	100	11.93322849	0.1537692249
25	0.01	100	14.44527698	0.1627692282
30	0.01	100	14.11019206	0.16553846
35	0.01	100	16.17123318	0.1676923037
40	0.01	100	18.18910742	0.1688461602
45	0.01	100	20.35364151	0.1703846157
50	0.01	100	22.97877812	0.1701538414
			time	PrecisionAt100
25	0.005	100	10.5194819	0.2296153903
25	0.001	100	10.553864	0.2330769151
25	0.01	100	11.57066941	0.1627692282
25	0.05	100	11.62842441	0.00307692308
25	0.1	100	11.5631876	0.009999999776
25	1	100	11.86126089	0.1624615341

25	10	100	5.62241578 1	0.04438461363
25	0.01	10	4.14486718 2	0.2346153855
25	0.01	50	10.5953085 4	0.2400769293
25	0.01	100	10.3451185 2	0.2330769151
25	0.01	150	15.2992842 2	0.2285384536
25	0.01	200	19.7520213 1	0.2166922987

Light FM Medium

when max iteration is 25, reg_para is 0.0005, and rank is 100
running time is 970.1552591323853
the Precision at 100 is 0.1948988139629364
when max iteration is 25, reg_para is 0.001, and rank is 100
running time is 974.5293567180634
the Precision at 100 is 0.06576398760080338
when max iteration is 25, reg_para is 0.01, and rank is 100
running time is 1010.5985140800476
the Precision at 100 is 0.00028876762371510267
when max iteration is 25, reg_para is 0.05, and rank is 100
running time is 1017.5408227443695
the Precision at 100 is 0.0008117325487546623
when max iteration is 25, reg_para is 0.1, and rank is 100
running time is 1025.7166633605957
the Precision at 100 is 0.0009811277268454432
when max iteration is 25, reg_para is 1, and rank is 100
running time is 1058.9258248806
the Precision at 100 is 0.007850159890949726

Light FM Medium

when max iteration is 15, reg_para is 0.001, and rank is 100
running time is 612.8246600627899
the Precision at 100 is 0.04661436751484871
when max iteration is 15, reg_para is 0.01, and rank is 100
running time is 639.8918566703796
the Precision at 100 is 0.00028990450664423406

when max iteration is 15, reg_para is 0.05, and rank is 100
 running time is 641.5064990520477
 the Precision at 100 is 0.0008117325487546623
 when max iteration is 15, reg_para is 0.01, and rank is 100
 running time is 631.054621219635
 the Precision at 100 is 0.00028990450664423406

Light FM Medium

when max iteration is 15, reg_para is 0.01, and rank is 10
 running time is 151.14958906173706
 the Precision at 100 is 0.00013074124581180513
 when max iteration is 15, reg_para is 0.01, and rank is 50
 running time is 367.12643027305603
 the Precision at 100 is 0.0001762164756655693
 when max iteration is 15, reg_para is 0.01, and rank is 100
 running time is 631.7152509689331
 the Precision at 100 is 0.00028990450664423406
 when max iteration is 15, reg_para is 0.01, and rank is 150
 running time is 890.8563482761383
 the Precision at 100 is 0.00025011366233229637

LightFM small

Max iter	reg_para	rank	precisionat100	time
15	0.005	50	0.2417692393	3.824167967
15	0.001	50	0.239230752	3.317512035
15	0.01	50	0.2417692393	3.384294033
15	0.05	50	0.1744615436	3.569705248
15	0.1	50	0.003538461635	3.604663134
15	1	50	0.00915384572	3.721331596
15	10	50	0.02192307636	3.774300337

lightfm			time	precisionAt100
25	0.005	100	10.5194819	0.22961539

				03
25	0.001	100	10.553864	0.2330769151
25	0.01	100	11.57066941	0.1627692282
25	0.05	100	11.62842441	0.00307692308
25	0.1	100	11.5631876	0.009999999776
25	1	100	11.86126089	0.1624615341
25	10	100	5.622415781	0.04438461363
25	0.01	10	4.144867182	0.2346153855
25	0.01	50	10.59530854	0.2400769293
25	0.01	100	10.34511852	0.2330769151
25	0.01	150	15.29928422	0.2285384536
25	0.01	200	19.75202131	0.2166922987

			precisionat100	time
15	0.005	50	0.2417692393	3.824167967
15	0.001	50	0.239230752	3.317512035
15	0.01	50	0.2417692393	3.384294033
15	0.05	50	0.1744615436	3.569705248
15	0.1	50	0.003538461635	3.604663134
15	1	50	0.0091538457	3.72133159

			2	6
15	10	50	0.0219230763 6	3.77430033 7

Medium Validation	maxiter	regpara	rank	rmse	map	ndcgAt	prec_k	time
	15	0.01	10	0.822664	6.86E-07	1.53E-05	1.14E-05	288.6063 399
	15	0.01	50	0.85733	0.000662 4	0.006625	0.00442	901.271
	15	0.01	100	0.86097	0.00343	0.02228	0.010958	1035.133
	15	0.01	150	0.854	0.0063	0.036689	0.01727	1931.537 4
	15	0.001	50	1.00163	9.67E-06	0.000182	0.000136 4	656.633
	15	0.01	50	0.85733	0.000662 4	0.006625	0.00442	901.271
	15	0.05	50	0.79	0.00258	0.02415	0.014159	414.44
	15	0.1	50	0.8109	7.60E-05	0.001557 635255	0.000859 38388	731.794