为了方便训练，将M替换为1，B替换为0，得到data2.csv文件

代码见testml.py

将数据的0.3部分作为测试集

得到的w0和w0如下

﻿Final gradient descend: [Parameter containing:

﻿tensor([[-6.5805e+06, -3.0125e+05, -4.8178e+05, ..., -2.2436e+05,

-2.7000e+05, 3.6266e+05],

[-6.8209e+05, -4.7741e+04, -8.7060e+04, ..., -9.6413e+03,

-3.4196e+04, 7.0703e+04],

[-2.5370e+06, -8.8406e+04, -8.2328e+04, ..., -5.1745e+04,

-4.1707e+04, 1.3431e+05],

...,

[ 3.0523e+06, 1.4795e+05, 1.5604e+05, ..., 5.2035e+04,

1.0286e+05, -1.6648e+05],

[ 9.9983e+06, 4.2633e+05, 9.3395e+05, ..., 2.7611e+05,

4.8024e+05, -6.1442e+05],

[-6.0457e+05, -1.6422e+04, -2.5955e+04, ..., -1.1225e+04,

-1.3835e+04, 8.1733e+03]], requires\_grad=True), Parameter containing:

tensor([-1.7132e+06, -1.3532e+05, -7.4129e+05, -1.5808e+06, -1.9706e+06,

-3.1935e+05, 1.3592e+05, 6.7734e+04, 7.8994e+05, -8.3808e+05,

-1.6657e+05, -1.3321e+06, -4.1998e+04, 2.2839e+05, 1.5334e+06,

4.3012e+05, 6.3583e+05, 6.0191e+05, -2.1660e+03, 7.3594e+04,

-2.3385e+05, 7.6849e+05, -2.2939e+05, 6.5922e+05, -1.4527e+06,

-6.1344e+05, -7.5545e+05, 1.5284e+06, 7.6794e+05, -1.4682e+06,

7.9252e+05, 2.4772e+06, -1.9177e+05], requires\_grad=True), Parameter containing:

tensor([[ 4861.5723, 18202.6211, -42153.7266, ..., -16906.4258,

-27709.6270, 83940.8281],

[ 39375.4922, -328768.6250, 467670.4062, ..., -45484.6836,

102188.7969, -624607.8125],

[ -21416.1562, 223670.1250, -209920.6875, ..., 10481.3877,

-119621.5547, 319936.9062],

...,

[ 56682.2617, -325249.3438, 429909.9062, ..., -31527.3398,

133526.1250, -625338.5625],

[ -20106.8320, -11332.9336, 35463.2812, ..., 55151.1055,

64644.5273, -101809.7422],

[ -1714.7551, 38741.9688, -83788.5547, ..., -6345.1133,

-22502.9492, 150223.6250]], requires\_grad=True), Parameter containing:

tensor([ 499051.7188, -3015719.2500, 1698154.1250, -128423.4453,

1805563.3750, 2336906.7500, -2194901.7500, -900543.1875,

1075192.3750, 1750325.6250, -2698545.7500, 500679.9062,

-1565996.1250, -5378019.0000, 944298.8750, 1720239.3750,

-1819666.5000, -2272955.2500, 939034.4375, 2221196.5000,

-76946.5859, 1793161.8750, -39703.6250, 728610.5000,

-271564.2188, -838072.6250, -4508488.5000, -4764396.0000,

-1614424.1250, -2611145.5000, -2872201.5000, -780984.2500,

815545.6875], requires\_grad=True), Parameter containing:

tensor([[ -491120.4688, 1222371.2500, -1320010.0000, ...,

497905.7500, 438258.8750, -535895.9375],

[ -354333.2500, 881656.0625, -963152.4375, ...,

365113.3438, 306437.5625, -392915.4688],

[ -383111.2500, 960489.9375, -1078585.2500, ...,

398998.6875, 304767.7188, -380082.1562],

...,

[ -528494.7500, 1310523.3750, -1438858.8750, ...,

540526.0625, 472008.2812, -586020.9375],

[ 105408.9297, -263804.4375, 289249.8750, ...,

-107550.3906, -93200.4062, 122729.8828],

[ -462960.2812, 1204794.1250, -1321862.6250, ...,

492955.9375, 396333.6562, -511536.7188]], requires\_grad=True), Parameter containing:

tensor([-5259254.5000, -3788129.0000, -4173476.0000, -1902258.5000,

-4070664.5000, 439676.6875, -3160751.5000, 5416010.0000,

-5040224.5000, 4532549.0000, 900710.2500, -4554869.0000,

-949033.0625, -2958626.5000, -4028760.0000, -5700993.5000,

-2854368.5000, 1379430.6250, 3231856.2500, 5768209.5000,

-3205688.7500, -2300105.2500, -5357529.5000, -2727052.7500,

-1574074.2500, 2032425.1250, 5493821.0000, 4932355.5000,

5397548.0000, -5147709.0000, -5663335.0000, 1136707.5000,

-5100740.0000], requires\_grad=True), Parameter containing:

tensor([[-3.3245e+10, -3.3242e+10, -3.3237e+10, -3.3234e+10, -3.3242e+10,

3.3245e+10, -3.3244e+10, 3.4501e+10, -3.3242e+10, 3.3241e+10,

3.3247e+10, -3.3249e+10, -3.3243e+10, -3.3246e+10, -3.3248e+10,

-3.3242e+10, -3.3244e+10, 3.3240e+10, 3.3244e+10, 3.3236e+10,

-3.3243e+10, -3.4485e+10, -3.3235e+10, -3.3247e+10, -3.3247e+10,

3.3250e+10, 3.3250e+10, 3.3244e+10, 3.3244e+10, -3.3247e+10,

-3.3242e+10, 3.3243e+10, -3.3237e+10]], requires\_grad=True), Parameter containing:

tensor([3.4681e+10], requires\_grad=True)]