

```

[Kamals-MacBook-Pro:test Java$ cp homework_1.py ~/SecureComputation/HW4/
[Kamals-MacBook-Pro:test Java$ python -m pdb homework_1.py
> /Users/Java/SecureComputation/CrypTen/test/homework_1.py(8)<module>()
-> import logging
[(Pdb) c
tensor([[ 10.1979, -7.9275,  8.1639, -4.1473,  8.8771,  6.3046,  2.4881,
          2.7219, 18.2963, 10.5338, -5.0391, -15.9928, -11.9484, -2.3564,
          11.8753, -8.6933,  2.8987, 19.7595, -11.2335,  1.7558, -9.1556,
          -13.1870, -19.9923, -21.7594, 11.2382, -6.1040, 10.1813, 10.9620,
           8.3160, 13.0241,  8.1260, -2.4229,  9.3416, 13.6692, -6.9239,
          -1.2254, -11.0112, -17.7180, 19.1678,  0.1892, -0.4983,  2.7729,
           3.9775, 16.0974, -9.3606,  9.9867,  3.6759, -10.7385, -1.3338,
           0.5016]])
tensor([[ 0.7645, -0.2355,  0.7645, -0.2355,  0.7645,  0.7645,  0.7645,  0.7645,
          0.7645,  0.7645, -0.2355, -0.2355, -0.2355, -0.2355,  0.7645, -0.2355,
          0.7645,  0.7645, -0.2355,  0.7645, -0.2355, -0.2355, -0.2355, -0.2355,
          0.7645, -0.2355,  0.7645,  0.7645,  0.7645,  0.7645,  0.7645, -0.2355,
          0.7645,  0.7645, -0.2355, -0.2355, -0.2355, -0.2355,  0.7645,  0.4537,
          -0.2338,  0.7645,  0.7645,  0.7645, -0.2355,  0.7645,  0.7645, -0.2355,
          -0.2355,  0.7645]])
Epoch 0 --- Training Accuracy 53.69%
tensor([[ 9.2780, -8.9445,  8.3827, -4.1971,  8.9329,  4.9727,  2.4802,
          0.5927, 18.6631,  9.2233, -5.5596, -14.9851, -11.6991, -2.8425,
          11.4766, -7.3779,  1.9068, 20.1284, -10.1369,  2.3762, -10.1872,
          -13.4536, -20.4685, -21.3348, 11.8991, -6.3384,  8.9892, 10.4286,
           6.2822, 11.3010,  8.1075, -1.5153,  9.6181, 14.5990, -7.6611,
          -1.5543, -10.0546, -18.1059, 18.7850,  0.2738,  0.7237,  2.8074,
           3.0658, 16.0169, -8.2918,  9.1561,  4.3028, -11.3065, -1.8527,
           0.4854]])
tensor([[ 0.6849, -0.3151,  0.6849, -0.3151,  0.6849,  0.6849,  0.6849,  0.6849,
          0.6849,  0.6849, -0.3151, -0.3151, -0.3151, -0.3151,  0.6849, -0.3151,
          0.6849,  0.6849, -0.3151,  0.6849, -0.3151, -0.3151, -0.3151, -0.3151,
          0.6849, -0.3151,  0.6849,  0.6849,  0.6849,  0.6849,  0.6849, -0.3151,
          0.6849,  0.6849, -0.3151, -0.3151, -0.3151, -0.3151,  0.6849,  0.4587,
          0.6849,  0.6849,  0.6849,  0.6849, -0.3151,  0.6849,  0.6849, -0.3151,
          -0.3151,  0.6703]])
Epoch 1 --- Training Accuracy 54.76%
tensor([[ 8.4580, -9.8207,  8.5975, -4.1671,  9.0166,  3.6579,  2.4764,
          -1.3900, 19.0958,  8.0193, -6.1012, -13.8560, -11.4501, -3.2799,
          11.1147, -6.1256,  0.9900, 20.5259, -8.9903,  3.0326, -11.1518,
          -13.6573, -20.9284, -20.8905, 12.6645, -6.5591,  7.8881,  9.9475,
           4.3182,  9.6713,  8.1340, -0.6444,  9.8301, 15.4748, -8.4089,
          -1.8188, -9.0974, -18.4413, 18.4854,  0.4175,  1.4861,  2.8718,
           2.1764, 16.0917, -7.1983,  8.2544,  4.9720, -11.7903, -2.3431,
           0.4953]])
tensor([[ 0.6199, -0.3801,  0.6199, -0.3801,  0.6199,  0.6199,  0.6199, -0.3801,
          0.6199,  0.6199, -0.3801, -0.3801, -0.3801, -0.3801,  0.6199, -0.3801,
          0.6199,  0.6199, -0.3801,  0.6199, -0.3801, -0.3801, -0.3801, -0.3801,
          0.6199, -0.3801,  0.6199,  0.6199,  0.6199,  0.6199,  0.6199, -0.3801,
          0.6199,  0.6199, -0.3801, -0.3801, -0.3801, -0.3801,  0.6199,  0.5374,
          0.6199,  0.6199,  0.6199,  0.6199, -0.3801,  0.6199,  0.6199, -0.3801,
          -0.3801,  0.6152]])
Epoch 2 --- Training Accuracy 55.91%
tensor([[ 7.6029, -10.5875,  8.8089, -4.0779,  9.2143,  2.3416,  2.3953,

```

Epoch 2 --- Training Accuracy 55.91%

```
tensor([[ 7.6029, -10.5875,  8.8089, -4.0779,  9.2143,  2.3416,  2.3953,
        -2.6104, 19.6002,  6.9265, -6.5789, -12.6281, -11.2844, -3.7501,
        10.7335, -4.9002,  0.1088, 20.9181, -7.8652,  3.6770, -12.0143,
       -13.8767, -21.3233, -20.3978, 13.4657, -6.7696,  6.8448,  9.4358,
        2.5363,  8.0885,  8.2292,  0.2275,  9.9842, 16.2355, -9.0284,
       -2.0691, -8.2302, -18.7953, 18.1726,  0.5225,  2.1429,  2.8948,
        1.3499, 16.1946, -6.1196,  7.3307,  5.7425, -12.2334, -2.7291,
        0.5379]))
tensor([[ 0.5753, -0.4247,  0.5753, -0.4247,  0.5753,  0.5753,  0.5753, -0.4247,
        0.5753,  0.5753, -0.4247, -0.4247, -0.4247, -0.4247,  0.5753, -0.4247,
        0.1841,  0.5753, -0.4247,  0.5753, -0.4247, -0.4247, -0.4247, -0.4247,
        0.5753, -0.4247,  0.5753,  0.5753,  0.5753,  0.5753,  0.5753,  0.3029,
        0.5753,  0.5753, -0.4247, -0.4247, -0.4247, -0.4247,  0.5753,  0.5753,
        0.5753,  0.5753,  0.5753,  0.5753, -0.4247,  0.5753,  0.5753, -0.4247,
       -0.4247,  0.5753]))
```

Epoch 3 --- Training Accuracy 57.12%

```
tensor([[ 6.7949, -11.2839,  9.1168, -3.9769,  9.3711,  1.0702,  2.4019,
       -3.7993, 20.1128,  5.8411, -7.0410, -11.3670, -11.0670, -4.1970,
        10.3948, -3.6471, -0.6026, 21.3370, -6.7883,  4.3940, -12.7955,
       -14.1218, -21.6307, -19.9204, 14.2950, -6.9992,  5.8496,  8.8883,
        0.8503,  6.5827,  8.3093,  0.7930, 10.1649, 16.8898, -9.6568,
       -2.2365, -7.3847, -19.1345, 17.9035,  0.6308,  2.7506,  2.9673,
        0.5441, 16.3342, -5.0351,  6.4344,  6.4616, -12.6182, -3.1325,
        0.6100]))
tensor([[ 0.5398, -0.4602,  0.5398, -0.4602,  0.5398,  0.5398,  0.5398, -0.4602,
        0.5398,  0.5398, -0.4602, -0.4602, -0.4602, -0.4602,  0.5398, -0.4602,
       -0.4602,  0.5398, -0.4602,  0.5398, -0.4602, -0.4602, -0.4602, -0.4602,
        0.5398, -0.4602,  0.5398,  0.5398,  0.5398,  0.5398,  0.5398,  0.5398,
        0.5398,  0.5398, -0.4602, -0.4602, -0.4602, -0.4602,  0.5398,  0.5398,
        0.5398,  0.5398,  0.5398,  0.5398, -0.4602,  0.5398,  0.5398, -0.4602,
       -0.4602,  0.5398]))
```

Epoch 4 --- Training Accuracy 58.00%

```
tensor([[ 6.0026, -11.9505,  9.5287, -3.8849,  9.5262, -0.1887,  2.4769,
       -4.9697, 20.6490,  4.7558, -7.4907, -10.0948, -10.7806, -4.6161,
        10.0947, -2.3934, -1.0200, 21.8153, -5.7615,  5.1132, -13.5256,
       -14.3773, -21.8582, -19.4588, 15.1602, -7.2382,  4.8622,  8.3312,
       -0.7602,  5.1271,  8.3919,  1.2744, 10.3554, 17.4905, -10.2797,
       -2.3408, -6.5732, -19.4914, 17.6708,  0.8024,  3.3272,  3.0912,
       -0.2024, 16.4736, -3.9108,  5.5649,  7.1485, -12.9543, -3.5745,
        0.6807]))
tensor([[ 0.5149, -0.4851,  0.5149, -0.4851,  0.5149, -0.1739,  0.5149, -0.4851,
        0.5149,  0.5149, -0.4851, -0.4851, -0.4851, -0.4851,  0.5149, -0.4851,
       -0.4851,  0.5149, -0.4851,  0.5149, -0.4851, -0.4851, -0.4851, -0.4851,
        0.5149, -0.4851,  0.5149,  0.5149, -0.4851,  0.5149,  0.5149,  0.5149,
        0.5149,  0.5149, -0.4851, -0.4851, -0.4851, -0.4851,  0.5149,  0.5149,
        0.5149,  0.5149, -0.1875,  0.5149, -0.4851,  0.5149,  0.5149, -0.4851,
       -0.4851,  0.5149]))
```

Epoch 5 --- Training Accuracy 60.39%

```
tensor([[ 5.2487, -12.5981,  9.9751, -3.7221,  9.6199, -1.1007,  2.5327,
       -6.0006, 21.1592,  3.7090, -7.8790, -8.8765, -10.4749, -4.9897,
        9.7927, -1.1617, -1.3307, 22.3801, -4.8276,  5.8107, -14.1529,
       -14.6559, -22.0543, -18.9543, 15.9934, -7.4781,  3.9310,  7.7049,
       -1.8554,  3.7434,  8.4231,  1.7092, 10.5881, 18.0868, -10.8142,
       -2.5478, -5.8398, -19.8248, 17.5686,  1.0503,  3.9290,  3.2850,
       -0.5325, 16.6124, -2.7871,  4.8438,  7.8015, -13.2548, -3.9949,
```