DL TRAINING RUN RESULTS:

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/Users/akram/AKRAM_CODE_FOLDER/FEDERATED_IOT_ML_SEC/opt/anaconda3/envs/pycaret_akram/bin/python/bin/python /Users/akram/AKRAM_CODE_FOLDER/IOT_DL/MLP_OBSS_WIFI6/Models/MLP_obss.py
Loading Training Dataset ... 1
Loading Scen 1 (A) ...
Loading Scen 1 (B) ...
Loading Scen 1 (C) ...
DONE !
Loading Training Dataset ... 2
Loading Scen 2 (A) ...
Loading Scen 2 (B) ...
Loading Scen 2 (C) ...
DONE !
Loading Test Dataset Scen 1 ...
DONE !
Loading Test Dataset Scen 2 ...
DONE !
Loading Test Dataset Scen 3 ...
DONE !
Loading Test Dataset Scen 4 ...
DONE !
Loss 0 = 10336.6779296875 , 8831.50732421875
Loss 100 = 373.09802398681643 , 301.8632507324219
Loss 200 = 210.25492935180665 , 149.23121643066406
Loss 300 = 196.46617126464844 , 139.59697341918945
Loss 400 = 189.6669059753418 , 132.52605438232422
Loss 500 = 183.54696960449218 , 127.3493537902832
Loss 600 = 180.08275604248047 , 123.65752029418945
Loss 699 = 177.35185470581055 , 121.13229751586914
torch.Size([5000]) torch.Size([5000])
4 TOTAL Mean squared error: 464.81
6 TOTAL Mean squared error: 366.36
8 TOTAL Mean squared error: 258.68
10 TOTAL Mean squared error: 313.08

4 APs :
[28.73855591 29.41664886 36.85956192 48.32772827 52.40065765
64.4793396 66.44804382 69.45471191 75.59555817 85.79273987
87.37155151 94.5863266 103.20517731 111.53328705 113.36231232
116.67370605 121.76742554 137.55201721 139.79133606 143.54745483
148.99113464 174.99645996 175.25354004 179.03979492 198.60430908
208.1161499 216.01266479 233.42512512 245.50045776 249.0630188
270.46710205 326.86138916 329.06719971 358.93310547 382.70144653
424.55187988 428.38555908 452.41549683 463.67086792

481.55010986
  481.63946533 573.39971924 672.55358887 802.80029297 802.9520874
  966.30822754 1019.83886719 1178.80371094 4126.56396484
4941.04101562]
torch.Size([200])

 6 APs :
 [13.82780743   28.60369301   30.33862877   34.19853592   36.90835571
   38.11190796   42.10139847   48.45996094   53.86037827   63.70196152
   83.19780731   84.64665222   85.95111084   95.550354   97.01062775
  106.4440918   124.97039795 150.99119568 162.93431091 185.16731262
  195.1703949   195.43797302 197.87249756 216.03361511 221.68348694
  257.73483276 281.80801392 307.70446777 311.99502563 327.74841309
  330.32064819 346.43569946 355.80200195 399.20272827
418.85574341
  478.30151367 496.17611694 514.29864502 578.08929443 711.2855835
  725.87078857 726.99481201 750.71679688 784.15789795 851.97723389
  904.20367432 988.01226807 1026.37817383 1283.52770996
1567.06555176]
torch.Size([300])

 8 APs :
 [17.99641037   31.02018738   36.88884735   39.13500214   44.53343201
   44.69232559   58.00442123   58.73348618   60.16046906   63.67092514
   66.02986908   86.31111145   89.31987   97.5042572   107.438797
  111.92153168 117.26383209 118.88806152 120.4739151   121.4139328
  125.72807312 139.0953064   149.3427887   159.32296753 162.63095093
  166.60380554 168.73866272 176.26820374 209.97612   210.06913757
  212.1806488   218.87670898 241.65464783 242.49000549 247.06680298
  275.56500244 292.29760742 308.40246582 336.99014282
383.39227295
  402.40725708 421.0206604   454.03967285 545.23480225 681.4296875
  713.39044189 722.81164551 765.25299072 886.38116455 1423.80981445]
torch.Size([400])

 10 APs :
 [22.5052433   28.92486572   32.69849396   41.31356812   53.25015259
   57.90804291   62.44771194   94.95044708   95.55897522 100.97923279
  110.76594543 116.90924072 123.70283508 125.96549988 135.70425415
  138.02682495 138.89222717 143.06164551 148.27584839 157.15939331
  195.72738647 200.74804688 220.36335754 225.54020691 239.4145813
  269.45501709 281.10101318 286.45834351 291.01303101 305.31985474
  305.80743408 318.84133911 331.76028442 335.11068726 341.85723877
  361.88815308 362.89526367 386.52429199 386.70718384
435.24838257
  464.46453857 515.03094482 518.29730225 689.5345459
699.43859863

 787.68200684 794.91711426 915.12823486 1115.53540039 1143.36413574]
torch.Size([500])
TOTAL Mean squared error: 464.81

2 Mean squared error: 175.00
tensor([[128.9975],
        [183.6825],
        [170.7011],
        [185.7407]], grad_fn=<SelectBackward>)
tensor([[126.1100],
        [191.1600],
        [160.6200],
        [162.6300]])
TOTAL Mean squared error: 366.36

33 Mean squared error: 346.44
tensor([[137.8405],
        [135.5159],
        [93.0049],
        [89.8684],
        [69.0158],
        [97.4356]], grad_fn=<SelectBackward>)
tensor([[140.9300],
        [145.2700],
        [75.3100],
        [71.0100],
        [82.3300],
        [131.0200]])
TOTAL Mean squared error: 258.68

12 Mean squared error: 292.30
tensor([[126.2961],
        [66.8791],
        [56.5519],
        [177.3629],
        [170.6023],
        [83.7131],
        [68.3370],
        [102.6920]], grad_fn=<SelectBackward>)
tensor([[125.9500],
        [69.8800],
        [52.3900],
        [131.0600],
        [172.2600],
        [73.1100],
        [71.6600],
        [96.2300]])

TOTAL Mean squared error: 313.08

41 Mean squared error: 32.70
tensor([[100.5830],
        [77.2458],
        [110.2624],
        [159.3248],
        [35.5515],
        [19.7456],
        [55.5648],
        [140.7236],
        [93.8620],
        [130.9671]], grad_fn=<SelectBackward>)
tensor([[94.3100],
        [77.3300],
        [110.2800],
        [154.0100],
        [34.4800],
        [19.0500],
        [60.1700],
        [150.9900],
        [100.9900],
        [139.9300]])
Saving...
1
2
3
4
DONE!

Process finished with exit code 0