```
mat_5 = [9 1 6 4 9; 6 8 4 0 8; 6 9 4 3 6; 2 7 1 0 8; 8 6 0 9 8];
mat_6 = [8 1 8 5 0 6; 9 2 7 7 1 5; 0 9 4 1 0 0; 2 6 6 6 1 1; 8 5 5 5 6
 3; 5 0 4 2 5 4];
mat_7 = [2 6 3 5 8 8 4; 8 2 6 6 8 7 2; 4 5 7 3 9 9 4; 7 5 9 9 0 5 5; 2
 1 6 9 9 5 0; 8 3 0 4 4 8 9; 2 6 7 7 4 8 7];
mat_8 = [7 4 8 1 7 8 8 3; 9 9 4 8 9 1 4 1; 9 2 6 2 8 2 0 3; 5 8 5 1 0
 5 4 1; 2 2 7 2 8 4 4 3; 0 3 8 1 0 7 3 3; 1 5 4 1 2 7 6 6; 5 4 2 9 3 8
 2 0];
mat_9 = [9 0 5 6 1 5 1 6 2; 3 9 2 8 4 8 9 6 3; 8 9 4 7 5 2 0 8 3; 0 8
 6 1 2 6 7 4 2; 5 5 4 1 2 4 8 2 3; 7 3 1 8 9 7 5 8 3; 9 9 4 6 6 0 1 0
 0; 2 1 3 5 5 9 9 6 7; 9 2 4 5 8 6 7 9 1];
mat_10 = [4 4 7 7 0 7 1 7 8 9; 0 4 2 7 7 8 4 1 6 6; 1 9 1 2 6 7 1 1 5
 1; 2 4 4 6 8 5 7 7 8 9; 6 5 3 5 3 5 5 1 4 9; 6 2 9 8 1 5 7 9 3 2; 2 2
 4 5 2 6 8 3 2 3; 1 4 3 1 3 5 6 9 1 8; 9 1 4 2 5 1 6 9 6 0; 6 5 4 0 9
 2 9 3 3 2];

mat_list = {mat_5, mat_6, mat_7, mat_8, mat_9, mat_10};

for i = 1:length(mat_list)
    tic
        inv(mat_list{i})
        norm(inv(mat_list{i}), 'fro')
    toc
end
```

```
ans =

   -0.1055    0.5450   -0.2996   -0.3483    0.1468
   -0.0832    0.0162    0.1099   -0.0054    0.0003
    0.1684   -0.3987    0.3629    0.1329   -0.1958
    0.0798   -0.4058    0.2523    0.1353   -0.0085
    0.0781   -0.1006   -0.0666    0.2002   -0.0125


ans =

    1.1176

Elapsed time is 0.000390 seconds.

ans =

    0.5530   -0.5563   -0.2026   -0.0524    0.5394   -0.5256
   -0.4834    0.5762    0.3089   -0.1698   -0.2860    0.2619
    1.2616   -1.4967   -0.4747    0.3721    0.7544   -0.6803
   -0.6954    0.8013    0.1192    0.0397   -0.4437    0.3642
   -0.0099   -0.1457   -0.0671    0.0837    0.0807    0.1156
   -1.5927    1.9735    0.7523   -0.4311   -1.3076    1.2607


ans =
```

```
    4.3932

Elapsed time is 0.000208 seconds.

ans =

    0.0317   -0.1095    0.1244    0.1633    0.0330    0.0838   -0.2823
    0.2668   -0.5020    0.2989    0.3558    0.1133    0.0806   -0.5376
   -0.1705   -0.2307    0.2811    0.1194    0.1160    0.0294   -0.1204
    0.0715    0.1382   -0.2417   -0.0400    0.0123   -0.0367    0.1335
   -0.0232   -0.9301    0.6826    0.4008    0.4936    0.3240   -0.8139
    0.0517    1.8465   -1.2405   -0.9292   -0.8857   -0.6020    1.5895
   -0.1845   -1.0247    0.6965    0.4019    0.4954    0.4172   -0.6804


ans =

    3.9878

Elapsed time is 0.000221 seconds.

ans =

  Columns 1 through 7

    0.1250    0.0567    0.0763   -0.0931   -0.2382    0.0665   -0.0087
   -0.1864   -0.0872   -0.0045    0.2915    0.2466   -0.1881    0.0321
    0.0532    0.1051   -0.0061   -0.1118   -0.1046    0.2536   -0.0970
    0.0674    0.1942   -0.0426   -0.2689   -0.2319    0.2421   -0.0050
   -0.1219   -0.1455    0.0132    0.1976    0.3560   -0.2682    0.0018
   -0.0912   -0.2289    0.0318    0.2316    0.2449   -0.2239    0.0188
    0.2511    0.1875   -0.1308   -0.2508   -0.2632    0.1649   -0.0004
   -0.0164    0.0888    0.0915   -0.1933   -0.1986    0.1220    0.1848

  Column 8

   -0.0244
    0.0293
   -0.0797
   -0.0044
    0.0685
    0.1492
   -0.0974
   -0.0660


ans =

    1.2745

Elapsed time is 0.001551 seconds.

ans =
```

```
  Columns 1 through 7

    0.0655   -0.0589   -0.0143   -0.0214    0.2197    0.1992   -0.0553
   -0.0134   -0.0115    0.0339    0.0668    0.1119    0.1587   -0.0439
    0.0193   -0.0120   -0.0049    0.0534   -0.2321   -0.3169    0.1427
    0.0022    0.1901   -0.0016   -0.1378   -0.2699   -0.3570    0.1411
   -0.0806   -0.0995   -0.0245    0.0567   -0.0665    0.0806    0.0723
    0.1485   -0.1293   -0.1451    0.2253    0.1841    0.5421   -0.1056
   -0.0758    0.1381   -0.0001   -0.1352   -0.0380   -0.2951    0.0415
   -0.0373    0.0378    0.1166   -0.0295   -0.0373   -0.1014   -0.1003
   -0.0305   -0.0849    0.1067   -0.0589    0.1050    0.0229   -0.0231

  Columns 8 through 9

   -0.1448   -0.1115
   -0.1227   -0.1274
    0.1963    0.1781
    0.2012    0.1776
    0.0502    0.0263
   -0.2521   -0.3388
    0.1133    0.2138
   -0.0051    0.1221
    0.1208   -0.1160


ans =

    1.3348

Elapsed time is 0.000961 seconds.

ans =

  Columns 1 through 7

   -0.0112    0.0892   -0.0331   -0.1437    0.0979    0.0028   -0.0701
   -0.0962   -0.2371    0.1797    0.1765    0.0952    0.0802   -0.0005
    0.1820    0.0426   -0.0854   -0.0820   -0.1354    0.0379   -0.0511
   -0.1794   -0.0122    0.0520    0.1357    0.1197    0.1741   -0.0942
   -0.0244    0.2233   -0.0741   -0.0922   -0.0420    0.0574   -0.1984
    0.1062    0.2293   -0.0560   -0.2743   -0.0782   -0.0988    0.0657
   -0.0414   -0.1723    0.0350    0.1318    0.0149   -0.0605    0.2218
   -0.0601   -0.0121    0.0326    0.0339   -0.0112    0.0487   -0.0555
    0.1053   -0.1525    0.0464    0.1355   -0.0625   -0.1447    0.1865
    0.0319    0.0278   -0.0661   -0.0044    0.0498   -0.0275   -0.0539

  Columns 8 through 10

    0.0269    0.0970    0.0002
   -0.0432   -0.0785   -0.0749
   -0.0291   -0.1260    0.2286
   -0.0525   -0.0226   -0.1541
    0.0545   -0.0013    0.1030
```

```
    0.1005    0.0811    0.0467
   -0.0535   -0.0057   -0.0331
    0.0772    0.0518   -0.0862
   -0.1208    0.0414   -0.0200
    0.0458   -0.0321    0.0274


ans =

    1.0357

Elapsed time is 0.000227 seconds.
```

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