|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Test Combinations |  | SAMTO | MFEA | MFEARR | LDAMFEA | MFEALBS | EBSGA | GMFEA | EMTEA | MTEA | MTSO |  |
| 1 | Task1 | Mean | 10.0007  | 11.0522  | 11.0208 | 10.8458 | 11.0492 | 11.0108 | 11.0222 | 10.9140 | 10.3307 | **10** |  |
| Std | 0.0004  | 0.0339  | 0.0121  | 0.2468  | 0.0211  | 0.0175  | 0.0389  | 0.0958  | 0.0815  | **0**  |  |
|  | p-value | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | **-** |  |
| Task2 | Mean | 10.0003 | 22.1661  | 33.1851 | 12.3083 | 21.7948 | 31.4878 | 12.0631 | 22.9343 | 23.6540 | **10** |  |
| Std | 0.0002 | 8.0770 | 3.7587 | 3.3575 | 6.8213 | 9.7010 | 0.6762 | 4.8967 | 3.7461 | **0** |  |
|  |  | p-value | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | 0.1818 | 6.3864e-05 | **-** |  |
|  | run time |  | 48.475 | 23.4591 | 28.7640 | 42.5013 | 15.7559 | 17.1184 | 26.1091 | 15.4868 | 16.5772 | **9.833** |  |
| 2 | Task1 | Mean | 10.0105  | 11.1892  | 10.6775  | 12.4526  | 11.2583  | 10.6488  | 11.0016  | 10.4852  | 10.1982  | **10**  |  |
| Std | 0.0042  | 0.3905  | 0.2930  | 0.5516  | 0.3409  | 0.2983  | 0.3444  | 0.2933  | 0.0672  | **0**  |  |
|  | p-value | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | **-** |  |
| Task2 | Mean | 10.0011 | 22.9403  | 39.0216 | 22.6929 | 23.8359 | 30.3381 | 13.1910 | 24.6026 | 22.3765 | **10** |  |
| Std | 0.0009 | 6.4943  | 8.1703 | 4.6181 | 5.3002 | 8.2905 | 3.2688 | 2.8066 | 4.0868 | **0** |  |
|  |  | p-value | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | 0.1818 | 6.3864e-05 | **-** |  |
|  | run time |  | 41.286 | 21.6697 | 27.0815 | 38.2364 | 15.0453 | 16.8033 | 25.8573 | 14.7800 | 15.4621 | **9.737** |  |
| 3 | Task1 | Mean | **10**  | 11.3  | 10.6  | 14.8  | 11.2  | 10.7  | 11.0  | 10.5  | **10**   | **10**  |  |
| Std | 0.0145  | 0.3606  | 0.1995  | 1.2186  | 0.4533  | 0.4650  | 0.2180  | 0.1080  |  0.0302  | **0**  |  |
|  | p-value | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | 0.1818 | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | **-** |  |
| Task2 | Mean | **1.5368e+03** | 1.9820e+03 | 1.6631e+03 | 3.4482e+03 | 2.0063e+03 | 1.6933e+03 | 1.8636e+03 | 1.6527e+03 | 1.8315e+03 | 3.9555e+03 |  |
| Std | **250.2424** | 477.9580 | 411.1307 | 543.3261 | 367.2894 | 283.8110 | 283.0637 | 348.3263 | 356.5711 | 919.8908 |  |
|  |  | p-value | 1.8267e-04 | 1.8267e-04 | 1.8267e-04 | 0.4274 | 1.8267e-04 | 1.8267e-04 | 1.8267e-04 | 0.1818 | 1.8267e-04 | - |  |
|  | run time |  | 44.325 | 22.6617 | 27.9563 | 41.7159 | 15.4353 | 16.5753 | 25.2840 | 15.0218 | 16.1239 | **10.047** |  |
| 4 | Task1 | Mean | 10.0003  | 18.4632  | 37.0405  | 10.0302  | 23.3919  | 30.1704  | 12.4131  | 22.2392  | 21.0861  | **10**  |  |
| Std | 0.0002  |  7.2876  | 3.0776  | 0.0290  | 5.8891  | 6.8777  | 0.4754  | 3.3141  | 4.7030  | **0**  |  |
|  | p-value | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | **-** |  |
| Task2 | Mean | **10** | 10.0160 | 10.0088 | 10.0002 | 10.0163 | 10.0083 | 10.0122 | 10.0042 | 10.0007 | **10** |  |
| Std | **0** | 0.0042 | 0.0028 | 0.0002 | 0.0047 | 0.0021 | 0.0024 | 0.0021 | 0.0004 | **0** |  |
|  |  | p-value | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | 0.1818 | 6.3864e-05 | **-** |  |
|  | run time |  | 42.089 | 23.3309 | 29.5363 | 40.8091 | 15.5381 | 16.9854 | 26.0091 | 15.2488 | 13.7762 | **7.874** |  |
| 5 | Task1 | Mean | 10.0417  | 11.1647  | 10.5103  | 13.1881  | 11.0718  | 10.6097  | 11.1838  | 10.3701  | 10.0037  | **10**  |  |
| Std | 0.0114  |  0.4749  | 0.1204  | 0.8932  | 0.2239  | 0.2014  | 0.3759  | 0.1100  | 0.0045  | **0**  |  |
|  | p-value | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | **-** |  |
| Task2 | Mean | 83.7798 | 95.8520  | 86.9020 | 43.3304 | 115.1157 | 132.2997 | 139.1000 | 99.8994 | 79.4019 | **38.2876** |  |
| Std | 21.8488 | 45.6634 | 35.2674 | 17.2054 | 35.1739 | 72.8975 | 50.5977 | 34.7151 | 31.9576 | **0.8658** |  |
|  |  | p-value | 0.0028 | 0.0211 | 0.0173 | 0.9097 | 1.8267e-04 | 1.8267e-04 | 1.8267e-04 | 0.1818 | 0.1041 | **-** |  |
|  | run time |  | 43.221 | 22.7892 | 27.5848 | 38.7720 | 15.1517 | 16.4239 | 25.1570 | 14.6352 | 15.7326 | **9.771** |  |
| 6 | Task1 | Mean | 10.0074  | 10.3819  | 10.3520  | 10.1715  | 10.3807  | 10.7010  | 10.4145  | 10.3045  | 10.0004  | **10**  |  |
| Std |  0.0024  | 0.0783  | 0.0753  | 0.4254  | 0.1143  | 0.4480  | 0.0931  | 0.0622  | 0.0004  | **0**  |  |
|  | p-value | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | **-** |  |
| Task2 | Mean | 10.1419 | 11.4734 | 11.4259 | 10.6034 | 11.4504 | 11.2005 | 11.5628 | 11.9000 | 10.1514 | **10** |  |
| Std | 0.0289 | 0.1589 | 0.1251 | 0.5724 | 0.2401 | 0.1657 | 0.1935 | 0.1366 | 0.0630 | **0** |  |
|  |  | p-value | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | 0.1818 | 6.3864e-05 | **-** |  |
|  | run time |  | 52.837 | 35.9140 | 42.8797 | 51.6958 | 27.8508 | 28.8004 | 37.7383 | 27.4866 | 28.8540 | **24.051** |  |
| 7 | Task1 | Mean | 10.2587  | 25.6990  | 35.4189  | 40.1412  | 26.7818  | 32.7076  | 28.3435  | 27.8744  | 23.4709  | **10**  |  |
| Std |  0.1060  | 2.3959  | 7.8990  | 7.3986  | 3.4329  | 8.8554  | 3.6908  | 2.8039  | 2.8258  | **0**  |  |
|  | p-value | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | **-** |  |
| Task2 | Mean | 94.6885 | 104.5505 | 108.8248 | **37.9496** | 113.0444 | 88.6591 | 111.7771 | 84.4852 | 75.2232 | 38.2599 |  |
| Std | 35.8293 | 29.1413  | 40.6339 | 1.0084 | 38.0231 | 30.1330 | 38.7332 | 34.3627 | 37.0461 | **0.6885** |  |
|  |  | p-value | 0.0028 | 1.8267e-04 | 1.8267e-04 | 0.1859 | 1.8267e-04 | 1.8267e-04 | 1.8267e-04 | 0.1818 | 0.2413 | **-** |  |
|  | run time |  | 46.398 | 22.2308 | 27.3875 | 40.1320 | 15.7565 | 16.5845 | 25.0912 | 14.9420 | 15.7830 | **9.759** |  |
| 8 | Task1 | Mean | 10.0225  | 10.7407  | 10.7442  | 10.1375  | 10.7258  | 10.9946  | 10.8173  | 10.7922  | 10.0092  | **10**  |  |
| Std |  0.0178  | 0.1917  | 0.1061  | 0.0973  | 0.1596  | 0.0457  |  0.1368  | 0.1509  | 0.0132  | **0**  |  |
|  | p-value | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | **-** |  |
| Task2 | Mean | 10.2910 | 11.5105 | 11.4987 | 10.6690 | 11.4624 | 11.1831 | 11.5750 | 10.8799 | 10.1102 | **10** |  |
| Std | 0.1073 | 0.2175 | 0.1142 | 0.2401 | 0.1721 | 0.1770 | 0.1614 | 0.0991 | 0.0925 | **0** |  |
|  |  | p-value | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | 0.1818 | 6.3864e-05 | **-** |  |
|  | run time |  | 50.113 | 34.4686 | 39.5348 | 49.8755 | 27.3690 | 28.7603 | 39.2262 | 27.2688 | 28.0101 | **23.382** |  |
| 9 | Task1 | Mean | 10.1 | 25.9  | 31.5  | 99.6  | 25.1  | 34.6  | 27.2  | 31.2  | 34.1  | **10**  |  |
| Std | 0.0568  | 3.3173  | 4.0681  | 23.1852  | 3.0272  | 5.5083  | 3.0711  | 2.0975  | 6.4926  | **0**  |  |
|  | p-value | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | 6.3864e-05 | **-** |  |
| Task2 | Mean | **1.6767e+03** | 2.0877e+03 | 2.0293e+03 | 3.3335e+03 | 1.8214e+03 | 1.7965e+03 | 1.8089e+03 | 1.8708e+03 | 1.9523e+03 | 4.4536e+03 |  |
| Std | **201.3052** | 295.7972  | 491.0466 | 623.4152 | 392.8547 | 280.1191 | 271.9370 | 279.0046 | 316.8564 | 607.6476 |  |
|  |  | p-value | 1.8267e-04 | 1.8267e-04 | 1.8267e-04 | 0.0036 | 1.8267e-04 | 1.8267e-04 | 1.8267e-04 | 0.1818 | 1.8267e-04 | - |  |
|  | run time |  | 39.668 | 18.9909 | 23.0260 | 33.5925 | 12.6675 | 13.6826 | 20.8503 | 12.3916 | 13.1330 | **7.978** |  |