

TABLE VIII: Performance comparison of DLiSA against its variants (i.e., DLiSA-I and DLiSA-II) of over 100 run in system z3. Statistically significant discrepancies are shown in bold ($\hat{A}_{12} > 0.56$ and p value < 0.05), where green cells indicate that DLiSA performs better; or red cells otherwise.

| Workload | Algorithm | Mean (Std) | \hat{A}_{12} (p value) |
|----------|-----------|---------------|--|
| W1 | DLiSA | 5.856 (0.011) | |
| | DLiSA-I | 5.856 (0.011) | 0.519 ($p = 0.582$) |
| | DLiSA-II | 5.858 (0.012) | 0.558 ($p = 0.095$) |
| W2 | DLiSA | 2.254 (0.608) | |
| | DLiSA-I | 2.120 (0.510) | 0.555 ($p = 0.132$) |
| | DLiSA-II | 1.998 (0.435) | 0.619 ($p < 0.001$) |
| W3 | DLiSA | 0.364 (0.660) | |
| | DLiSA-I | 0.302 (0.617) | 0.506 ($p = 0.861$) |
| | DLiSA-II | 0.354 (0.627) | 0.511 ($p = 0.770$) |
| W4 | DLiSA | 2.324 (0.150) | |
| | DLiSA-I | 2.313 (0.130) | 0.503 ($p = 0.933$) |
| | DLiSA-II | 2.303 (0.107) | 0.508 ($p = 0.826$) |
| W5 | DLiSA | 3.150 (0.111) | |
| | DLiSA-I | 3.173 (0.237) | 0.532 ($p = 0.385$) |
| | DLiSA-II | 3.170 (0.097) | 0.629 ($p < 0.001$) |
| W6 | DLiSA | 1.322 (0.130) | |
| | DLiSA-I | 1.313 (0.085) | 0.513 ($p = 0.618$) |
| | DLiSA-II | 1.387 (0.245) | 0.585 ($p = 0.006$) |
| W7 | DLiSA | 0.292 (0.458) | |
| | DLiSA-I | 0.221 (0.004) | 0.532 ($p = 0.102$) |
| | DLiSA-II | 0.249 (0.152) | 0.522 ($p = 0.365$) |
| W8 | DLiSA | 8.746 (0.005) | |
| | DLiSA-I | 8.746 (0.005) | 0.508 ($p = 0.823$) |
| | DLiSA-II | 8.806 (0.590) | 0.520 ($p = 0.570$) |
| W9 | DLiSA | 3.181 (0.003) | |
| | DLiSA-I | 3.181 (0.003) | 0.515 ($p = 0.491$) |
| | DLiSA-II | 3.182 (0.004) | 0.530 ($p = 0.237$) |
| W10 | DLiSA | 6.816 (0.236) | |
| | DLiSA-I | 6.804 (0.222) | 0.502 ($p = 0.953$) |
| | DLiSA-II | 6.817 (0.246) | 0.513 ($p = 0.746$) |
| W11 | DLiSA | 7.948 (0.654) | |
| | DLiSA-I | 7.940 (0.499) | 0.504 ($p = 0.919$) |
| | DLiSA-II | 7.940 (0.506) | 0.517 ($p = 0.677$) |
| W12 | DLiSA | 3.878 (0.009) | |
| | DLiSA-I | 3.878 (0.008) | 0.507 ($p = 0.846$) |
| | DLiSA-II | 3.900 (0.148) | 0.595 ($p = 0.014$) |