**QUALITY CHECK**

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| Gap between minimum time taken for a truck to travel 10 cities  Optimal Cost: 902.0  GA Cost: 902, Gap: 0.00%  ACO Cost: 902, Gap: 0.00% | Gap between execution times when truck travels 10 cities  Optimal Cost: 0.055023193359375  GA Cost: 0.20008087158203125, Gap: 263.63%  ACO Cost: 1.374680519104004, Gap: 2398.37% |
| Gap between minimum time taken for a truck to travel 15 cities  Optimal Cost: 1130.0  GA Cost: 1171.0, Gap: 3.63%  ACO Cost: 1153.21, Gap: 2.05% | Gap between execution times when truck travels 15 cities  Optimal Cost: 0.18099713325500488  GA Cost: 0.27891111373901367, Gap: 54.10%  ACO Cost: 2.827849864959717, Gap: 1462.37% |
| Gap between minimum time taken for a truck to travel 25 cities  Optimal Cost: 1755.0  GA Cost: 1917.79, Gap: 9.28%  ACO Cost: 1846.1, Gap: 5.19% | Gap between execution times when truck travels 25 cities  Optimal Cost: 1.5172593593597412  GA Cost: 0.7890639305114746, Gap: -47.99%  ACO Cost: 7.864167213439941, Gap: 418.31% |
| Gap between minimum time taken for a truck to travel 50 cities  Optimal Cost: 3198.0  GA Cost: 3745.8300000000004, Gap: 17.13%  ACO Cost: 3456.23, Gap: 8.07% | Gap between execution times when truck travels 50 cities  Optimal Cost: 5.746546030044556  GA Cost: 1.5569870471954346, Gap: -72.91%  ACO Cost: 30.0167396068573, Gap: 422.34% |