Universidade Federal da Paraíba
Centro de Informática
Disciplina: Análise e Projeto de Algoritmos
Professor: Christian Azonyetin

*Integrantes:*

Pedro Henrique Marinho Salvino
20210024569

Pedro Augusto Gomes Medeiros
20210024522

Victor Pessoa Oliveira Ortins
20210024667

## *Tabela com os resultados computacionais:*

| instancia | otimo | valorHeuristica | tempoHeuristica | gapHeuristica | valorVND | tempoVND | gapVND | valorILS | tempoILS | gapILS |
|---|---|---|---|---|---|---|---|---|---|---|
| n120k7_A.txt | 1029 | 5121 | 0.000025s | 397.667.638 | 4855 | 0.001317s | 371.817.298 | 4682 | 0.122391s | 355.004.859 |
| n120k7_B.txt | 2052 | 12142 | 0.000023s | 491.715.400 | 11876 | 0.001308s | 478.752.437 | 11668 | 0.110441s | 468.615.984 |
| n120k7_C.txt | 2040 | 12142 | 0.000025s | 495.196.078 | 11876 | 0.001384s | 482.156.863 | 11621 | 0.118966s | 469.656.863 |
| n120k7_D.txt | 1046 | 5121 | 0.000024s | 389.579.350 | 4855 | 0.001421s | 364.149.140 | 4651 | 0.127874s | 344.646.272 |
| n14k5_A.txt | 471 | 837 | 0.000002s | 77.707.006 | 549 | 0.000007s | 16.560.510 | 520 | 0.018262s | 10.403.397 |
| n14k5_B.txt | 565 | 1119 | 0.000003s | 98.053.097 | 737 | 0.000024s | 30.442.478 | 590 | 0.017952s | 4.424.779 |
| n14k5_C.txt | 569 | 1119 | 0.000003s | 96.660.808 | 737 | 0.000010s | 29.525.483 | 732 | 0.017677s | 28.646.749 |
| n14k5_D.txt | 471 | 837 | 0.000005s | 77.707.006 | 549 | 0.000008s | 16.560.510 | 471 | 0.019524s | 0 |
| n199k17_A.txt | 1672 | 15143 | 0.000073s | 805.681.818 | 14896 | 0.002828s | 790.909.091 | 14523 | 0.248079s | 768.600.478 |
| n199k17_B.txt | 3302 | 41207 | 0.000061s | 1.147.940.642 | 40960 | 0.002954s | 1.140.460.327 | 40660 | 0.212853s | 1.131.374.924 |
| n199k17_C.txt | 3301 | 41207 | 0.000057s | 1.148.318.691 | 40960 | 0.002885s | 1.140.836.110 | 40619 | 0.258004s | 1.130.505.907 |
| n199k17_D.txt | 1672 | 15143 | 0.000059s | 805.681.818 | 14896 | 0.002842s | 790.909.091 | 14616 | 0.287349s | 774.162.679 |
| n22k3_A.txt | 605 | 1075 | 0.000003s | 77.685.950 | 868 | 0.000017s | 43.471.074 | 605 | 0.021536s | 0 |
| n22k3_B.txt | 777 | 1591 | 0.000003s | 104.761.905 | 1384 | 0.000014s | 78.120.978 | 777 | 0.021980s | 0 |
| n22k3_C.txt | 777 | 1591 | 0.000004s | 104.761.905 | 1384 | 0.000016s | 78.120.978 | 777 | 0.019542s | 0 |
| n22k3_D.txt | 605 | 1075 | 0.000004s | 77.685.950 | 868 | 0.000014s | 43.471.074 | 605 | 0.022320s | 0 |
| n31k5_A.txt | 650 | 1908 | 0.000016s | 193.538.462 | 1653 | 0.000049s | 154.307.692 | 1150 | 0.027140s | 76.923.077 |
| n31k5_B.txt | 933 | 3293 | 0.000007s | 252.947.481 | 3038 | 0.000036s | 225.616.292 | 2427 | 0.026005s | 160.128.617 |
| n31k5_C.txt | 939 | 3293 | 0.000008s | 250.692.226 | 3038 | 0.000039s | 223.535.676 | 2058 | 0.022097s | 119.169.329 |
| n31k5_D.txt | 656 | 1908 | 0.000006s | 190.853.659 | 1653 | 0.000032s | 151.981.707 | 1319 | 0.024610s | 101.067.073 |
| n43k6_A.txt | 801 | 2564 | 0.000007s | 220.099.875 | 2251 | 0.000146s | 181.023.720 | 1887 | 0.029096s | 135.580.524 |
| n43k6_B.txt | 1203 | 4976 | 0.000007s | 313.632.585 | 4663 | 0.000147s | 287.614.298 | 3885 | 0.029447s | 222.942.643 |
| n43k6_C.txt | 1208 | 4976 | 0.000007s | 311.920.530 | 4663 | 0.000160s | 286.009.934 | 3882 | 0.028088s | 221.357.616 |
| n43k6_D.txt | 802 | 2564 | 0.000006s | 219.700.748 | 2251 | 0.000143s | 180.673.317 | 1739 | 0.026147s | 116.832.918 |
| n64k9_A.txt | 934 | 4474 | 0.000014s | 379.014.989 | 4165 | 0.000268s | 345.931.478 | 3740 | 0.040646s | 300.428.266 |
| n64k9_B.txt | 1503 | 9523 | 0.000012s | 533.599.468 | 9214 | 0.000266s | 513.040.585 | 8801 | 0.037488s | 485.562.209 |
| n64k9_C.txt | 1510 | 9523 | 0.000013s | 530.662.252 | 9214 | 0.000262s | 510.198.675 | 7053 | 0.035342s | 367.086.093 |
| n64k9_D.txt | 932 | 4474 | 0.000017s | 380.042.918 | 4165 | 0.000293s | 346.888.412 | 3749 | 0.042083s | 302.253.219 |
| n9k5_A.txt | 428 | 651 | 0.000002s | 52.102.804 | 609 | 0.000002s | 42.289.720 | 471 | 0.017127s | 10.046.729 |
| n9k5_B.txt | 506 | 885 | 0.000002s | 74.901.186 | 843 | 0.000002s | 66.600.791 | 549 | 0.017800s | 8.498.024 |
| n9k5_C.txt | 559 | 885 | 0.000002s | 58.318.426 | 843 | 0.000002s | 50.805.009 | 809 | 0.018319s | 44.722.719 |
| n9k5_D.txt | 408 | 651 | 0.000018s | 59.558.824 | 609 | 0.000002s | 49.264.706 | 456 | 0.019962s | 11.764.706 |