Thy Vu CSS 534 Autumn 2016 Professor Munehiro Fukuda

Program Assignment #1: Outputs

Outputs are generated on uw1-320-00 computer from my user folder.

## Output for 1 thread:

```
thymv@uw1-320-00:~/prog1$ g++ Tsp.cpp Timer.cpp -fopenmp -o Tsp
thymv@uw1-320-00:~/prog1$ ./Tsp 1
# threads = 1
generation: 0
generation: 0 shortest distance = 1265.72
                                                 itinerary = V1SPMBQAN26G4J37DX80TF95ZUH0EYRLCWKI
generation: 1 shortest distance = 1067
                                        itinerary = V1WMPC20E5SBAF97DLGN4RQJT3HY68IKXOUZ
generation: 2 shortest distance = 986.482
                                                 itinerary = EMPDQR3BYH0UJ2CS51VO48KG9FXI6AL7ZWTN
                                                 itinerary = VI09867ALRB0P5CWYZ14NTX3DEUFKH0SM2JG
generation: 3 shortest distance = 936.306
generation: 4 shortest distance = 721.286
                                                 itinerary = VIO9864NTXFKGL7AHYZ1U0EDR3QPMS5CWJ2B
generation: 7 shortest distance = 711.756
                                                 itinerary = VIO8X9FKTNGLA4673RQPCMW5S2HZY1EUJBD0
generation: 8 shortest distance = 641.258
                                                 itinerary = V1ZHCSW520LA3RDQBPMEYUJ6I048FK9TXNG7
generation: 11 shortest distance = 588.023
                                                 itinerary = V1YZHU0E2WS5CMPOBDRAL7J0I64NTGXFK983
generation: 14 shortest distance = 547.794
                                                 itinerary = V1YZHE02WSC5MPB0D3R7LAKFXNT4G9I0JU68
generation: 16 shortest distance = 518.093
                                                 itinerary = V1YZH5CWSMPQBDR37LAF9KT8XG4N0I6UJ20E
                                                 itinerary = V1YZH5CWSMPQBDR37LAFKTN489XG0I6J0E2U
generation: 18 shortest distance = 506.354
generation: 20
generation: 20 shortest distance = 502.795
                                                 itinerary = V1YZHE025CWSMPBQDR37LA4NTXKF9G8I06JU
generation: 22 shortest distance = 485.408
                                                 itinerary = V1YZHUE025CWSMPBDR37LAFK9GXNT48I06J0
generation: 25 shortest distance = 478.897
                                                 itinerary = V1YZHUE02WSC5MPBQDR37LAGKF9XNT48I06J
generation: 28 shortest distance = 474.364
                                                 itinerary = V1YZHUE025CWSPMQBDR37LAGXKF94NT80I6J
generation: 33 shortest distance = 470.202
                                                 itinerary = V1YZHUE02WSC5MPQBDR37LA9FKGXNT48I06J
generation: 40
generation: 45 shortest distance = 468.509
                                                 itinerary = V1YZHUE02WSC5MPQBD3R7LAFK9GXNT480I6J
generation: 47 shortest distance = 466.624
                                                 itinerary = V1YZHUE02WSC5MPQBDR37LAF9KGXNT480I6J
                                                 itinerary = V1YZHUE02SWC5MP0BDR37LAF9KGXNT480I6J
generation: 48 shortest distance = 465.436
                                                 itinerary = V1YZHUE02W5CSMPQBDR37LA9FKGXNT48I06J
generation: 59 shortest distance = 465.285
generation: 60
generation: 60 shortest distance = 453.554
                                                 itinerary = V1YZHUE025CWSMPQBDR37LAF9KGXNT480I6J
generation: 80
generation: 100
generation: 100 shortest distance = 452.975
                                                 itinerary = V1YZHUE025CWSMPQBDR37LAF9KGXNT48I06J
generation: 102 shortest distance = 450.238
                                                 itinerary = V1YZHUE025CWSMPQBD3R7LAF9KGXNT480I6J
generation: 118 shortest distance = 449.658
                                                 itinerary = V1YZHUE025CWSMPQBD3R7LAF9KGXNT48I06J
generation: 120
generation: 140
elapsed time = 9223982
thymv@uw1-320-00:~/prog1$
```

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## Output for 4 threads:

```
thymv@uw1-320-00:~/prog1$ ./Tsp 4
# threads = 4
generation: 0
generation: 0 shortest distance = 1265.72
                                                 itinerary = V1SPMBOAN26G4J37DX80TF95ZUH0EYRLCWKI
                                                 itinerary = V1X80T4J37RLKFZUH0EYMBPWSC26GQAN9I5D
generation: 1 shortest distance = 1106.14
generation: 2 shortest distance = 967.344
                                                 itinerary = 04GXK8UZ5WCMBR3QDN9FL6I1VHE7JY02SPTA
generation: 3 shortest distance = 881.913
                                                 itinerary = V14R37DLGNF9XAKBQMP20E5SCWJ0TZYUHI68
generation: 4 shortest distance = 825.993
                                                 itinerary = V1YJI89X460ZUH5SWPM2DAL7R3BQ0ENTFGKC
generation: 5 shortest distance = 819.24
                                                 itinerary = PMSWC5EJ02HYV1IOT4N98GK7LAFDR3QBZUX6
                                                 itinerary = V1YUZHE0W5C2SPMR3DBQ7JFA94NT680IKGLX
generation: 6 shortest distance = 708.952
                                                 itinerary = V1HZYUE20BQMPDR3J0I8XN4TGK9AL7F5CWS6
generation: 7 shortest distance = 705.171
generation: 9 shortest distance = 656.92
                                                 itinerary = V1YHZUE0JBMP0D2WSC5R37X48TN9FKI06ALG
                                                 itinerary = V1YZH5CWSMPQDBUE3R7984TNXKF06IAGLJ02
generation: 10 shortest distance = 651.309
generation: 11 shortest distance = 633.712
                                                 itinerary = V1YZH5SWCMPBQ0E2DLA9KX4NT8I06R37GFJU
generation: 12 shortest distance = 604.704
                                                 itinerary = V1YHZUE02WSC5MPBDQAL7R3I06JN48TGFKX9
                                                 itinerary = V1YZHGX9KFALR3D0BPMSWC52EU0J7I06TN48
generation: 13 shortest distance = 599.425
generation: 14 shortest distance = 563.925
                                                 itinerary = V1YZUE20H5CWSPMBQDR34NT8GXKFA7L9I06J
generation: 15 shortest distance = 552.814
                                                 itinerary = V1YZHU60I84NTKF9XGR3DBPMWSC52E0J7LAQ
generation: 16 shortest distance = 536.147
                                                 itinerary = V10I684NTXGKF9L7A3RD0BPMSW5HZYUJ0EC2
generation: 17 shortest distance = 503.244
                                                 itinerary = 1VIO684XNTGF9KAL73RDBOPMWSC52E0JUZHY
generation: 19 shortest distance = 496.965
                                                 itinerary = V1YZH5CWSMPBDR37LA9FKGXNT4860IUE20JQ
generation: 20
generation: 20 shortest distance = 488.117
                                                 itinerary = V1YZHUE02WSC5MPBQDR37ALJ60I84NTX9FKG
generation: 23 shortest distance = 483.217
                                                 itinerary = V1YZHUE025CWSMPOBDR3AL7J60I8TN4XGFK9
generation: 24 shortest distance = 481.522
                                                 itinerary = V1YZHUE025CWSMPBDQ3R7LAKF9J60I84NTXG
generation: 27 shortest distance = 479.088
                                                 itinerary = V1YZHUE02WSC5MPBDJ60I84NTXGK9FAL7R3Q
                                                 itinerary = V1YZHUE02WSC5MPOBDR37LA9FKGXNT480I6J
generation: 30 shortest distance = 470.781
generation: 33 shortest distance = 470.202
                                                 itinerary = V1YZHUE02WSC5MPQBDR37LA9FKGXNT48I06J
generation: 39 shortest distance = 466.624
                                                 itinerary = V1YZHUE02WSC5MPQBDR37LAF9KGXNT480I6J
generation: 40
                                                 itinerary = V1YZHUE02W5CSMPQBDR37LA9FKGXNT480I6J
generation: 49 shortest distance = 465.865
generation: 55 shortest distance = 465.558
                                                 itinerary = V1YZHUE025SCWMPQBDR37LAF9KGXNT480I6J
generation: 60
                                                 itinerary = V1YZHUE02WSC5MPQBD3R7LAF9KGXNT480I6J
generation: 63 shortest distance = 463.307
generation: 64 shortest distance = 462.548
                                                 itinerary = V1YZHUE02W5CSMPQBD3R7LA9FKGXNT480I6J
generation: 65 shortest distance = 461.708
                                                 itinerary = V1YZHUE02W5CSMPQBDR37LAF9KGXNT480I6J
                                                 itinerary = V1IO684TNXGF9KAL7R3DBQPMSWC5HYZUE20J
generation: 67 shortest distance = 459.828
generation: 77 shortest distance = 458.755
                                                 itinerary = V1YZHUE025CWSMPQBDR37LAFK9GXNT48016J
generation: 80
generation: 81 shortest distance = 458.391
                                                 itinerary = V1YZHUE02W5CSMPOBD3R7LAF9KGXNT480I6J
generation: 89 shortest distance = 457.711
                                                 itinerary = V1YZHUE025CWSMPQBDR37LA9FKGXNT480I6J
generation: 98 shortest distance = 457.462
                                                 itinerary = V1YZHUE025WCSMPQBD3R7LAF9KGXNT480I6J
generation: 100
generation: 100 shortest distance = 453.554
                                                 itinerary = V1YZHUE025CWSMPOBDR37LAF9KGXNT480I6J
generation: 120
generation: 120 shortest distance = 452.975
                                                 itinerary = V1YZHUE025CWSMPQBDR37LAF9KGXNT48I06J
generation: 121 shortest distance = 450.238
                                                 itinerary = V1YZHUE025CWSMPQBD3R7LAF9KGXNT480I6J
generation: 139 shortest distance = 449.658
                                                 itinerary = V1YZHUE025CWSMPQBD3R7LAF9KGXNT48I06J
generation: 140
elapsed time = 3422313
thymv@uw1-320-00:~/prog1$
```