

Name (print) _____

Asgn # 6 Due Friday April 24 11am in CS Office (B237)

[Or bring it to class on Thursday April 23]

Dr. Kaminski - you have my word that:

1. I wrote this entire application myself - in accordance with the guidelines in the course policies & syllabus and university policies of what's considered acceptable student academic conduct. Any other code (longer than a couple lines) used in this assignment which was created by someone else (even if changed slightly) or was written jointly with someone else is both clearly attributed (in a comment in the code) and described on the BOTTOM OF THIS COVER PAGE.
2. The program code attached here did actually produce the data file which are attached here.
3. There was no editing of the data file after the attached programs produced them (except perhaps the font, font size and/or page-orientation for printing).

Signature _____

Final score for asgn is outputPoints MINUS the negative programming points: _____ (you can calculate this)

YES, even if OUTPUT is totally correct, you could get 0 points for asgn if program didn't follow the specs!

----- for GRADER (below) -----

Here's **SOME** things to definitely check**_____ a range of 0-100 points for OUTPUT correctness****MapData.bin & CityNames.txt - displayed to the Log file**

- up to -15 points if PrettyPrint does not display the 2 files correctly, as shown in the specs (and things align because you used a fixed- width font and a small enough font so there's no wrap-around)

Output from UserApp - displayed to the Log file

- up to -60 points if TotalDistance and ShortestRoute values are in-correct
 - if route/distance OBVIOUSLY wrong such that a programmer SHOULD HAVE CAUGHT the problem and fixed it (like duplicate cities on the route, like cities aren't part of a "reasonable-looking" route, like the route includes way-off-the-route cities), THEN take off lots of points as opposed to a slightly-wrong route/distance
- -8 points if ShortestRoute goes from Destination to Start (rather than Start to Destination)
- -8 points if ShortestRoute shows city NUMBERS (rather than city NAMES)
- up to -6 points if formatting, spacing, blank lines, blatantly ignoring wording, etc. doesn't follow the specs (a mis-spelt word or missed blank line or such can be forgiven with no point-loss)
- -8 points if Trace of Targets lists cities in the WRONG ORDER i.e., in cityNumber order as shown in PrettyPrint (rather than IN THE ORDER THEY WERE SELECTED DURING THE ROUTE ALGORITHM)
- -8 points if all cities in CityPairs file are not processed (including the 1st and last)
- -20 points if LowerPenn/UpperPenn (or UpperPenn/LowerPenn) start/destination pairs do NOT show 2 SEPARATE searches (i.e., start-to-theBridge and theBridge-to-destination)

_____ a range of 0-100 points for PROGRAM CODE structure/format/style

- -20 points if the program uses RawData.txt file rather than MapData.bin file
- up to -15 points for NOT using program/class/method structure & naming & functionality shown in the specs
- up to -20 points if Route & MapData classes and UserApp program (and their methods) do something other than what they're supposed to (like doing what some other class/method is responsible for (based on what their names "advertise" that they do)
- -25 points if the EXTERNAL MapData file is loaded into memory for processing (but YES, the CityNames file and the HeaderRecord from MapData.bin file SHOULD be loaded into memory by MapData's constructor)
- -10 points if getRoadDistance reads in more than just a single SHORT from the BINARY file
- -10 points if getRoadDistance does NOT use random access - i.e., calculates byteOffset based on the "big formula" (from the specs), then a seek, then a read of 1 short