

1. Use the procedure described in the instructor guide to determine the length of the longest common subsequence between the following strings by hand. Show all the steps and justify the table entries of the serial and parallel table filling functions.

Text: GCTCAGC
Pattern: AGGTAC

Text: BACDB
Pattern: BDCB

Show the longest common subsequence of the text/pattern pairs by indicating on the table which cells are used during the matching function.

2. Use the table to show what there is a data dependency from one diagonal to the next and why there is not a data dependency along each diagonal.
3. What is the anticipated speed-up as a function of the number of threads? Justify your answer.