PL09

Due Mar 28, 2019 by 3pm **Points** 10 **Submitting** a file upload **File Types** zip
Available Mar 26, 2019 at 3pm - Mar 28, 2019 at 3pm 2 days

This assignment was locked Mar 28, 2019 at 3pm.

Study Chapters 12 "Lists", 13 "List Implementations That Use Arrays", 14 " A List Implementation That Links Data", 15 "Iterators".

Enter at least one interview question into the bank of "Interview Questions" - use your alias instead of your name. Find a question on the internet that pertains to any topic that we studied in this class.

IN PREPARATION FOR THE LAB:

- Go over Lecture Notes: `lect09.ppt`
- Open `Lab09.zip` and read the provided descriptions of the applications that we will be implementing in the lab.
- Trace how the `isSubsequence` algorithm decides the following:
  - <a b a> is a subsequence of <a b a>
  - <a b c> is not a subsequence of <a c b>
  - <a b a> is a subsequence of <b c a c b a>
  - <a b a> is not a subsequence of <b c a c a b>
  - <a b a a> is not a subsequence of <b c a c b >
  - <a b a a> is not a subsequence of <a b a>
  - <a b c> is not a subsequence of <b c a c b a>
  - <> is a subsequence of <b c a c b a>
- Is X a subsequence of Y in the following? Show the matches.
  - X = < a b c a>; Y = <b c d a e c a e a f b a b b d e c d e a b d>
- Trace how the algorithm creates primes and composites lists from the given candidates list:

  `2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17`
- See sample runs for the MagicTrick and show all steps how the algorithm generates the sequences
- Trace the matching game for the following 2 scenarios. For each, show removed elements for each pass and simulate shuffling if necessary:

  1. `35 96 53 52 94 38 16 59 48 69 37 82 81 45 60 70 18 71 90 90 19 85`
  2. `29 14 81 71 76 52 98 13 86 11 15 24 23 77 10 67 16 37 40 44 39 31`