Instructions:

- All code is to use the Beginning Student with List Abbreviations.

- The first part of the exam is a series of multiple choice questions. Read the instructions carefully. You must complete the answer sheet found at the end of the exam.

- Individual questions will indicate which design recipe components must be included for full marks. Unless otherwise specified, you can assume the following:
  - "Complete the function ..." means you are only required to provide the function body and any helper functions you deem necessary. Helper functions may appear after the primary function definition.
  - Helper functions you define **only** require a function header and body.
  - Examples and tests must use `check-expect`, and unless otherwise allowed, must be different from any examples supplied in the question. Examples also count as test cases.

- Your functions do not have to check for values not specified by the contract unless we ask you to do so.

- Functions you write may use:
  - Any function you have written in another part of the same question.
  - Any function we asked you to write for a previous part of the same question (even if you didn't do that part).
  - Any other built-in function or special form **included in the course notes or the list functions allowed for assignments**, unless specifically noted in the question.
  - You are **not** allowed to use other functions such as **if** or **reverse**, since they have never been allowed for assignments.

- Throughout the exam, you should follow good programming practices as outlined in the course such as appropriate use of constants, meaningful identifier names, and use of helper functions where appropriate.

- If you believe there is an error in the exam, notify a proctor. An announcement will be made if a significant error is found.

- It is your responsibility to properly interpret a question. Do not ask questions regarding the interpretation of a question; it will not be answered and you will only disrupt your neighbours. If there is a non-technical term you do not understand you may ask for a definition.

- If, despite your best efforts, you are still confused about a question, state your assumptions and proceed to the best of your abilities.

- If you require more space to answer a question, you are likely writing too much. However if you do need more space, you may use the blank page(s) at the end of this exam, but you must **clearly indicate** in the provided answer space that you have done so.