

UNIVERSITY OF TORONTO  
Faculty of Arts and Science  
CSC 148, Winter 2021  
Duration — 120 minutes

- This test consists of 5 questions. Each question is in a separate file that you will download.
- Each question indicates what file or files to upload with your solution to the question, and what to call it.
- You may always write helper functions or methods unless asked not to.
- Docstrings and comments are not required unless asked for.
- pyTA results will not contribute to your grade.
- Hand in each question as you complete it! You can hand in a revised solution later during the test if needed.
- There is a 10-minute grace period during which you can hand in your work with no deduction. Afterwards, there will be a late penalty of 10% per minute.
- The last file you submit determines any late penalty that will be applied to your whole test.

Take a deep breath.

This is your chance to show us

How much you've learned.

We *want* to give you the credit

That you've earned.

A number does not define you.