

SLOG topic: selection sort, merge sort, quick sort
& big-oh.

Office hours

MW - 11-noon

T - 1-2 pm

CSC148 fall 2013

review

week 13

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Outline

the little reveal...

First page: aid, rules, length.

PLEASE HAND IN

UNIVERSITY OF TORONTO
Faculty of Arts and Science

December 2013 Examinations

CSC148H1F

Duration — 3 hours

PLEASE HAND IN

Allowed aids: one 8.5" x 11" handwritten aid sheet (both sides)

Student Number: _____

Last Name: _____

First Name: _____

Do not turn this page until you have received the signal to start.
(In the meantime, please fill out the identification section above,
and read the instructions below.)

This exam consists of 6 questions on 16 pages (including this one).
When you receive the signal to start, please make sure that your copy
of the exam is complete.

Please answer questions in the space provided. You will earn 20% for
any question you leave blank or write "I cannot answer this question."
You may earn substantial part marks for writing down the outline
of a solution and indicating which steps are missing.

Write your student number at the bottom of pages 2-16 of this exam.

1: _____/15
2: _____/12
3: _____/16
4: _____/12
5: _____/12
6: _____/8
TOTAL: _____/75

~1/2h



Good Luck!

last 3 blank.

topics

- ▶ objects, ADTs, classes, OO design
- ▶ stacks, queues
- ▶ Exceptions, inheritance
- ▶ recursion, unit testing, tree traversal
- ▶ trees, binary trees, binary search trees
- ▶ big-Oh, sorting algorithms
- ▶ properties, MapReduce, memoize

*(trees as linked
data structures)*



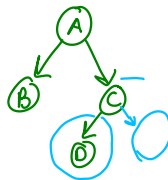
materials

worked example

▶ slide examples, *.py files

▶ labs, exercises

▶ assignments



given $\text{flatten}(\text{node: BTreeNode}) \rightarrow (\text{LLNode}, \text{LLNode})$:
if node is None, return (None, None)