

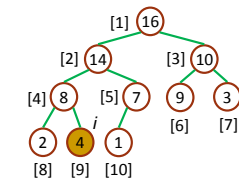
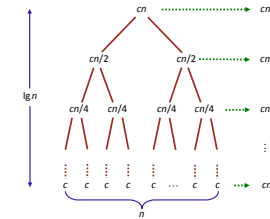
# Algorithm Syllabus

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National Taiwan Ocean University

## What Will You Learn From Algorithm?

- ▶ Introduction
  - ▶ Getting Started
  - ▶ Growth of Functions
  - ▶ Recurrences
- ▶ Sorting and Order Statistics
  - ▶ Heapsort
  - ▶ Quicksort
  - ▶ Sorting in Linear Time
  - ▶ Medians and Order Statistics
- ▶ Data Structures
  - ▶ Hash Tables
  - ▶ Binary Search Trees
  - ▶ Red-Black Trees
  - ▶ Augmenting Data Structures



2

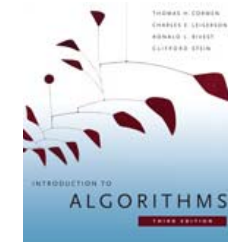
## Course Objectives

- ▶ To help you develop a solid understanding of what algorithm is
- ▶ To equip you to use fundamental algorithm effectively in subsequent courses
- ▶ To help you be able to design and analysis algorithms
- ▶ To help you be able to implement computer-based solutions to solve real problems

3

## Textbooks

- ▶ Introduction to Algorithms, Third Edition
  - ▶ Authors : Cormen, Leiserson, Rivest and Stein
  - ▶ Publisher : MIT Press (2009)
  - ▶ ISBN : 978-0-262-03384-8
- ▶ 代理商
  - ▶ 開發圖書
  - ▶ 電話: 02-8242-3988



4

## TAs and Grading Policy

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### ▶ TAs

- |            |                                                                                                           |
|------------|-----------------------------------------------------------------------------------------------------------|
| ▶ 吳宗霖 蔡建偉  | 資工所碩二                                                                                                     |
| ▶ E-mail   | <a href="mailto:lleelkkk@hotmail.com">lleelkkk@hotmail.com</a>                                            |
| ▶ Homepage | <a href="http://www.cs.ntou.edu.tw/lincc/courses/al101">http://www.cs.ntou.edu.tw/lincc/courses/al101</a> |
| ▶ TA hours | TBA                                                                                                       |
| ▶ Labs     | INS114B    INS501                                                                                         |
| ▶ Phones   | 6608        6643                                                                                          |

### ▶ Grading Policy

- ▶ Midterm exam : 25%
- ▶ Final exam : 25%
- ▶ In-class tests : 20%
- ▶ Homework assignments : 30%