Lab 1

Week 2

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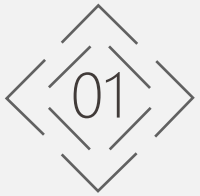
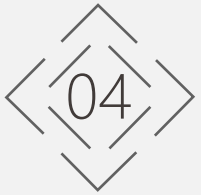


Course Overview

Env setup (Labs/Assignment)

Lab 1 - 101



Useful links: slides/recording/codes..

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Part One

Course Overview

PLEASE ADD YOUR TITLE HERE

***Ref*:** Course outline: https://webcms3.cse.unsw.edu.au/COMP3331/22T3/outline

Score distribution

Lab

Programming Assignment

Mid-term Test

Final Exam (double pass)

Contents

Week 1	Fundamentals
Week 2~3	Application Layer
Week 4~5	Transport Layer
Week 7	Midterm exam
Week 8~9	Network Layer
Week 9	Link Layer
Week 10	Security

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Part Two

Env Setup

Lab1 – VLab - python

Env setup

VLab - important for your labs and assignment

- Web access: http://vlabgateway.cse.unsw.edu.au
- PC access(better): TigerVNC

Python & Java - for your assignment:

- basic syntax

- socket programming

- exception

Ref: https://taggi.cse.unsw.edu.au/FAQ/Really_quick_guide_to_VLAB/

Lab 1

Linux basics

Lab1

- make sure you are working on the **Vlab.**
- You will learn:
  - Nslookup
  - Ping
  - Traceroute
  - Shell script

Ref: https://webcms3.cse.unsw.edu.au/COMP3331/22T3/resources/80681

Lab1 – Exercise 1

Use “nslookup” command

Lab1 – Exercise 2

Use Ping command and Browser to check

Hosts	Pingable	Browser access	Comment
www.unsw.edu.au	Yes	Yes	
8.8.8.8	Yes	No	Google DNS server

Lab1 – Exercise 3

Q1: Use “traceroute” command

Q2:

Draw the map to find the diverge

IP -> geolocation:

http://www.yougetsignal.com/tools/network-location/

https://tools.keycdn.com/geo

Q3: Traceroute from internet to your machine

Lab1 – Exercise 4

Q1~2: Do the calculation

$$T = physical\_distance / speed\_of\_light$$

Draw the table:

Host	Distance	RTT	T	Ratio
www.uq.edu.au	750km	40ms	13ms	3.07

Q3: Check the lecture slides

THANKS

Rui Li