

CS 301 - Lecture 12

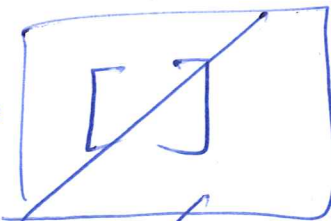
①

Logistics

1. Project 5 (movies) - due tomorrow.
2. Office hours - check updated schedule on Piazza.

Review

CSV - Comma Separated Values
Lists of Lists.

netids = 
~~qyin27~~
hzhang

(2)

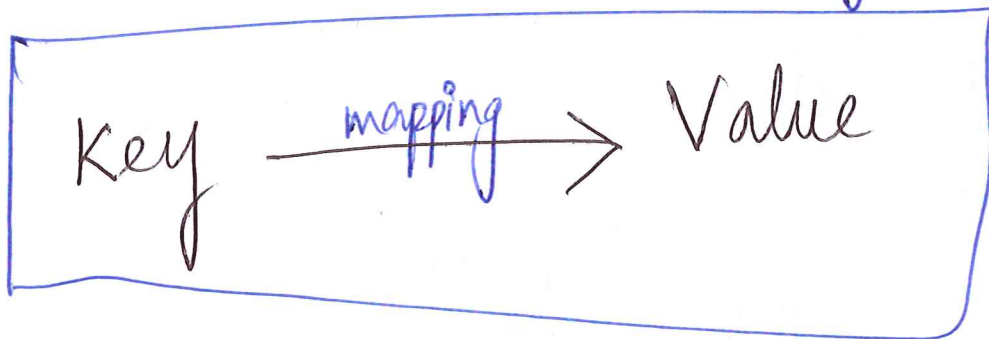
Data Structures

Lists

Dictionaries

Dictionary

word \longrightarrow meaning/definition



Phone directory

Names	Phone numbers
'A'	123
'B'	456
'C'	789

③

Index:	'A'	'B'	'C'	→ Key
Values	123	456	789	→ Values

d →

$d['A'] \Rightarrow 123$

$d['C'] \Rightarrow 789$

$d['Z'] \Rightarrow \text{error}$

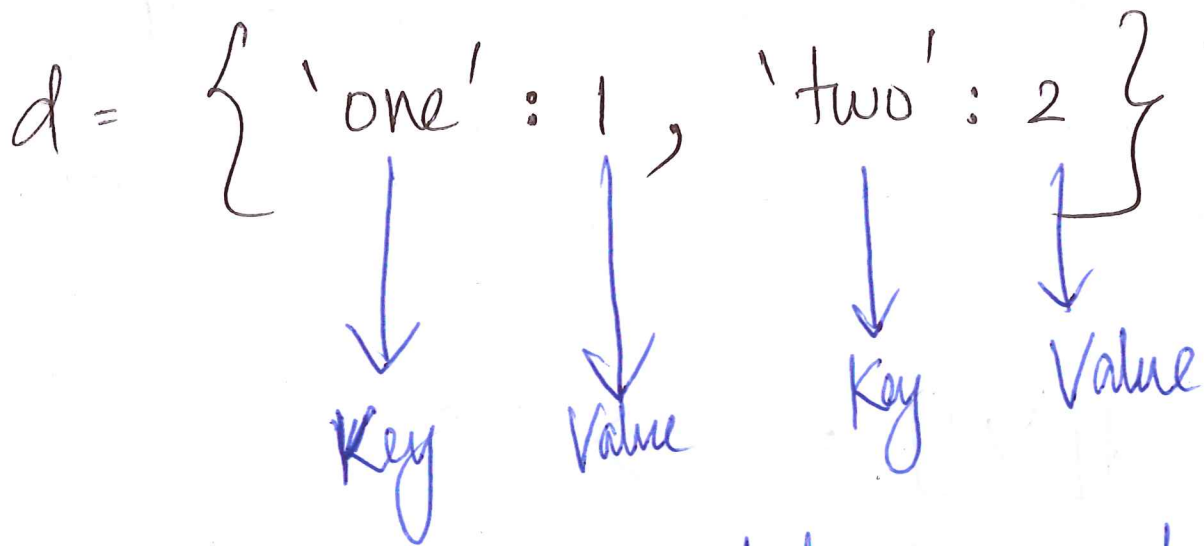
Syntax

$d = \text{dict}()$

$d = \{ \}$

words	values
'one'	1
'two'	2
'three'	3

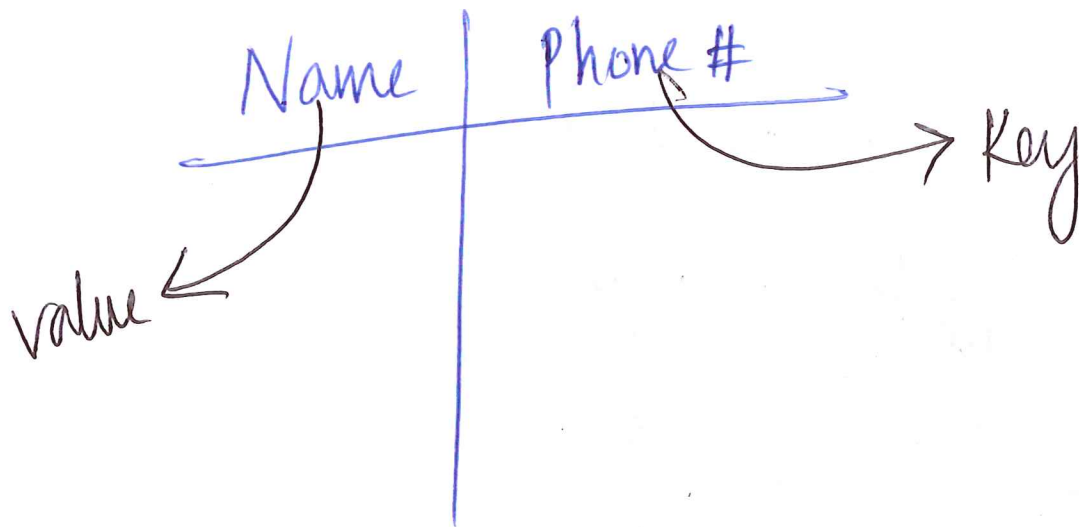
(4)



Dictionary - mapping between key-value pairs

Keys \rightarrow always unique

Multiple keys can ~~have the~~ be mapped to the same value.



Key ⁵ Value

apples: 3

mangoes: 4

oranges: 2

words = ["apple", "mango", "apple"]

word_count

Key	Value
"apple"	1 2
"mango"	1

Key	Value
<u>'apple'</u>	1 2