

CSE 101 2-12-26

- Pas: ext. 1 day.

Helper Functions

• required

hash()
probe()

do not alter

• optional

Build order

findSlot()	1
insertIndex()	2
expandTable()	3
expandData()	4
compactData()	5

ADT OPS : see Project PDF

setValue(D, k, v)

- compute hash code for key k
- find table slot where it exists or to be placed
- find current idx in table slot

if key exists, overwrite existing val
else // key k does not exist

do insertion:

- expand data if necessary
- Put (k, v, code) in data
- expand table if necessary
- compact data if necessary

compacting data

data

0	null, 0, 0
1	a, a, a
2	a, b, a
3	◊, c, a
4	◊, d, a
5	a, e, a
6	null, 0, 0
7	null, 0, 0
8	null, 0, 0

← next

data

0	n, 0, 0
1	., a, .
2	., b, .
3	., e, .
4	n, 0, 0
5	n, 0, 0
6	n, 0, 0
7	n, 0, 0
8	n, 0, 0

← next