

University Data Collection:

Alireza Rahbar
301040709 ara14@sfu.ca

Hash table

Number Of University

N

Each entry in the hash table:

- * University Name
- * University mailing address.
- * University email of Registrar
- * University phone number
- * pointer to student listing

tableSize
-1

Student Data Collection:

Student listing
for University X

Number of Students

$M = 6$

0	3010
1	3011
2	3012
3	3013
4	3014
5	3015
6	3016
...	

Hash table

with student number
as search key.

3010 A

3011 B

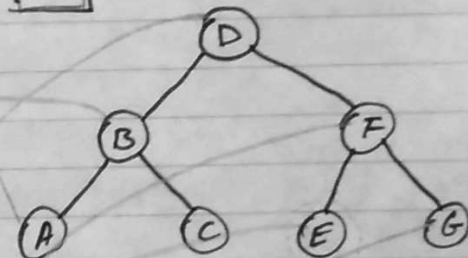
3012 C

3013 D

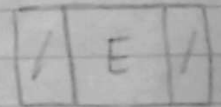
3014 E

3015 F

3016 G



Each element has left
and right child (pointers).
see example below



AVL BST

sorted by
last name.

Each student element has:

- * St #
- * St last name
- * St first name
- * St email
- * St mailing address
- * St name of high school
- * program
- * faculty

Can be searched by last
name in $O(\log n)$.