

SUBJECT: Week 10 Searching

NO: _____

DATE: ____/____/____

1) Sequential Search

56: 13 13 17 26 44 56 88 97
 1 2 3 4 5 6 ans: 6 \checkmark

20: 13 13 17 26 44 56 88 97
 1 2 3 4 5 6 7 8
 ans: 8 \checkmark

data: 224562, 137456, 214562,

2. Hashing

140145, 214576, 162145,
 144467, 199645, 234534

00

01

02

224562

Ans: in array 4 \checkmark

03

214562 *1

04

05

140145

06

162145 *3

07

144467

08

199645 *4

09

10

11

12

13

14

234534

15

16

137456

17

214576 *2

18

19

Binary Search

1) Find 56
 begin mid end
 ↓ ↓ ↓

13 13 17 26 44 56 88 97

1st round: target(56) > mid

begin mid end
 ↓ ↓ ↓
~~13 13 17 26 44 56 88 97~~

2nd round: target(56) = mid /ans: 2 \checkmark

2) Find 20

13 13 17 26 44 56 88 97
 ↑ ↑ ↑
 begin mid end

1st round: target(20) < mid

begin mid end
 ↓ ↓ ↓
~~13 13 17 26 44 56 88 97~~

2nd round: target(20) < mid

mid end
 ↓ ↓
~~13 13 17 26 44 56 88 97~~

begin
 ↓
 3rd round: target(20) < mid

ans: 3 \checkmark