

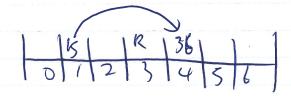
= 1+2=3

=) Ingot 22 Of index)

(3) Insert 76 36%721.
1 is already surplet 2) 1+(3-(36%))=4 0123456=) "1,984 36 at "ndex 4

(4) Renar 22 Found 22 at index 3, delete

(S) Find 36 ⇒) 1+(3-(36%)) = 4 Fand 76 O4 Trades 4, return



(6) Insert to 1,40)= 100/07=)

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Part C

Green that there are 3 housh functions, in indices, and 25 indices are time (2 are false). In order to see a false positive, and three hash function must return time, and the probability of the event is $(\frac{2}{3})^2 = \frac{1}{4}$, therefore or average, we whi get in It & fave positives

3. Lauhe smallysis

For the large test, I used the entire text of Hamet.

For the first moderate -5(20) test on uniformly randon data,

I used signal() function to senerate random rumbers from 1 to 600.

For the second moderate -5(20) test on English text see,

I used the inauguran speech from president John F. Kennedy

Hamlet: 5000
Randon Mumbers; 100
Title speech: 100

Hamlet: 107299
Random numbers: 7393
THC speech: 2613

Randon Numbers: 1000

(5)
Hamlet. 3,75
Randon Mumber. 3,39
5 Fil Speech: 10 1-91

- (6)
 Hamlet, 26955
 Reviden Mumber, 900
 TEK: 1241
- the random numbers has far-less cache miss than the speech. I believe this happened due to the fact may the numbers were "uniformly random! as whereas the words in speech was not random. Also, the andom number less divary has more rotations despite chansing the capacity
- (8) I related each of Prophy Rotate calls one certificatione could one than one that for all text cases, there are always four-more rishly rotations than left rotations, sometimes doubling.