SMART kapp

Isomorphic

"egh" "abb"

s = "egg" t = "abbh"

s = "foo" t = "bar"

[egga] [abbh] for i in range(len(s))

S[i]. 9→0(t[i])

1→2→0

ee za

5 x 10⁴

s = 1000 t =

[i ...... ee] [..ae]

th[t[i]] = s[i]

th[b] == s[i]

{

e : z

e : a

g : b

h : b

}

{

k

a : h

a : e

b : g

}

S Hash

T Hash

TC: O(len(s)) = O(n)

SC: O(1) = 128x2 = O(256) = O(1)

if (x==y) if ____

el if (x>y) else ____

if ____

s = " "

t = ""

Isomorphic

"egh" "abb"

s = "egg" t = "abbh"
a

s = "foo" t = "bar

[egg a] [abbh] for i in range(len(s))

S[i]. iso(T[i])
isIso

5 x 10^4

s = 1000 t =

th[t[i]] = s[i]
th[b] == s[i]

[i ....el] [..ae]

{
e : a
g : b
h : b
}

{
k
a : h
a : e
b : g
}

TC: O(len(s)) = O(n)

SC: O(1) = 128 x 2 = O(256) = O(1)

K: "aet"

"eat"

[aet
ate
tea
tae
eta]

20 0 08 0 0 1 0 0 1

"Thaarani"

t, h, a, a, r, a, n, i

[20, 8, 1, 1, 18, 1, 14, 9]

[1, 1, 1, 8, 9, 14, 18, 20] z : 97+26

[a, a, a, h, i, n, r, t]

aaahinrt

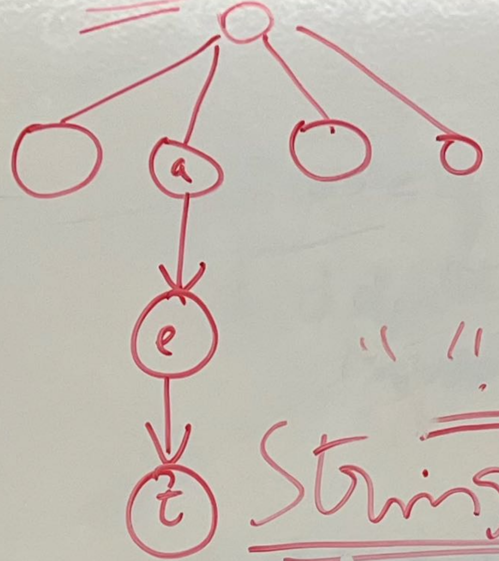
[tea,
ate,
1,20,5]

↳ pr

" blah "

1, a: 97
b:

Tries



10

"".join( )

Stringbuilder → string

```
Class S{
                    O(1)
   equals( ) { }
   hashcode( ) { }
   }
}

Main
S  s1 = new S( )
S  s2 = new S( )
Sys.Print(s2)
```

Tae t "a"

"aet"

→ ("Thirunaavukkarasu")m

"8ECOD976"

O(1)

hf("a") => hash

["a" :
"Thiru..." :
:]

Custom Comparator

Compar to

b > a

a-b

- Heap
- Iterators

Group Amagrams

n

ip $n \times (m^2 \log m)$

["eat", "tea", "tan", "ate", "nat", "bat"]

$\xrightarrow{m}$

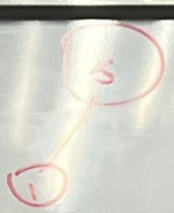
op [["eat", "tea", "ate"], ["bat"], ["nat", "tan"]]

no. of possible key - n

{
"aet" : ["eat", "tea", "ate"]

"ant" : ["tan", "nat"]

"abt" : ["bat"]
}



['e', 'a', 't']

if S.equals(t)

if S==t:

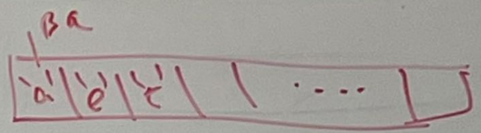
Sri - $n \times (m \log m)$

Rohit - $n \times (m^2 \log m)$ $n \times m \times m \log m$

↳ sort

↳ hashing → iterate thru each char

String



['a', 'e', 't']

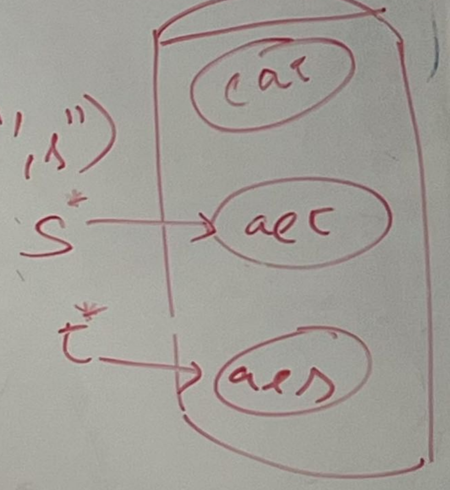
int
char
String

Immutable.

s = "aet"

t = "aet".replace("t", "s")

t = "aes"



Class String

private S[] = []

s = [' ', ' ', ' ...]

HW

1. What is the equalent of Stringbuilder in Python?

way 2

('l', 'a', 't')