Given two strings, S, t, return true if t is anagram of S

anagram: a word or phrase made up of letters of another word, using all letters exactly once.

example → S = "anagram"

t = "nagaram"

returns true

---

original string S

→ a n a g r a m

p

t

↳ n a g a r a m

Hash table

hash_seen = { "a": XX3
"n": 1
"g": 1
"r": 1
"m": 1 }

hash_seen2 = { "n": 1
"a": 3
"g": 1
"r": 1
"m": 1 }

→ hash_seen keys

hash_seen[key] == hash_seen2[key] ✓

~~else~~ else ~~X~~

Space → $O(N+M)$ (S → t)

Time → $O(N+M)$

Solution

Can Sold both f and S → then == ?

time → $O(n \log n)$

memory → $O(1)$