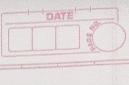
Empt 3
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2023300038



In this experiment, a rolling hash has been used. It is larically like a stiding window of size of pattern to book. If the output of hash function and that of window and pattern is some, then there might be a hit. We must been manually the check all characters to verify. It arheines O(n+m) time complowing in her (average function of the hash function is good, but O(n on) if hash function is boo simple infolling hash, we remove contribution of outgoing character and add that of senoming character.

This is much better than precomputing the entire hash and storing in array.

For implement this, we must first convert an pattern and first in characters of test into numerou hash value using base of (ASCII 256) and pt large number a . Each character gives the positional right to bash.

Pre rolling lash Step is,

Ant val = (d x ( Ant val - tent [i] \* hash)

+ kent [i + an] ) % og

if tat val = to pat val -> do bente forme checking

The Graph of the Time Countin shows & a few large spikes in the data. This may be due to the Corperted strong being in the end of string or may specious matches bo check. Overall as size of pathern to check inceases, the time required inseases.