

RABIN – KARP STRING MATCHING ALGO

ROLLING HASH FUNCTION

Rabin-Karp String Matching Algorithm - Code

Sanket's Notebook

Saving

Simplified Ribbon

Sanket Singh

Sign out

File Home Insert Draw View Print Tell me what you want to do Edit in OneNote Give Feedback To Microsoft Share

14 November 2018 21:49

Rolling Hash $O(1)$

Prime number \rightarrow base

6

3

result = 0;

for (i=0; i < n; i++) {

result += s[i] * pow(Prime, i);

abc

abc

rolling Hash 2

abc

len(substr) - 1

abc

old Hash

new Hash

prev = bcd

3rd step

Hash(bcd) \Rightarrow

subtract the first char's ASCII

Divide it with given prime

add the ASCII

multiply with power of prime

len(pat) - 1