

Homework 06: Substring Searching Problem

Due Tuesday, December 12th, 2017

Instruction

Submit your answer to this question via PC² under your account by the posted due time. No late submissions will be accepted. Note that homework is opened-book, but no outside assistance is permitted.

Problem

Given a string $s[0..n-1]$ and a pattern $p[0..m-1]$, write a hash function that prints all occurrences of $p[]$ in $s[]$. You may assume that $n > m$. [Warning: Input Data is pretty big so design a faster algorithm]

Sample input

```
THIS IS A TEST TEXT  
TEST  
AABAACAADAABAABA  
AABA
```

Sample output

```
Pattern found at index 10  
Pattern found at index 0  
Pattern found at index 9  
Pattern found at index 12
```