socrative

Module - 15 (copy) Score:

1. Whenever we detect a mismatch, we already know some of the characters in the text (since they matched the pattern characters prior to the mismatch). We can take advantage of this information to avoid backing up the text pointer over all those known characters.

Which algorithm below works on this idea?

A Boyer Moore

B Rabin Karp

C KMP

D Brute Force

2. Which algorithm uses DFA simulation?

A Boyer Moore

B Rabin Karp

C KMP

D Brute Force

3. Which algorithm uses NFA simulation?

A Boyer Moore

B Rabin Karp

C KMP

D None of the above

4. We compute a hash function for the pattern and then look for a match by using the same hash function for each possible M-character substring of the text.

Which algorithm below works on idea ?

A Boyer Moore

B Rabin Karp

C KMP

D Brute Force

5. Knuth-Morris-Pratt substring search accesses no more than M + N characters to search for a pattern of length M in a text of length N.

A True

B False

6. On typical inputs, substring search with the Boyer-Moore mismatched character heuristic uses ~N M character compares to search for a pattern of length M in a text of length N.

A) True

B) False

7. Knuth-Morris-Pratt is guaranteed linear-time with no backup in the input

A) True

B) False

8. The Monte Carlo version of Rabin-Karp substring search is linear-time and extremely likely to be correct, and the Las Vegas version of Rabin-Karp substring search is correct and extremely likely to be linear-time.

A) True

B) False