COSC229 Tutorial on pattern matching

(1) Trace the KMP algorithm for the following pattern and text.

\[ \text{pat} = a b c a b c a b b, \quad \text{text} = a b c a b c a b c a b c a b c a b b \]

Also trace the naive algorithm with the above pattern and text. Compare the number of character comparisons over the two methods.

(2) Trace the KMP algorithm for the following pattern and text.

\[ \text{pat} = a b c a b b a b b, \quad \text{text} = a b c a b c a b c a b c a b c a b b a b b \]

Also trace the naive algorithm with the above pattern and text. Compare the number of character comparisons over the two methods.