Knuth-Morris-Pratt

Align both strings at their beginning position and begin comparing

Comparisons: 1
Knuth-Morris-Pratt

If symbols match, compare the next symbols in both $P$ and $T$

Comparisons: 2
If symbols don’t match, and the current symbol in \( P \) is \( i > 1 \), align \( F(i) \) in \( P \) with the current symbol in \( T \):

Comparisons: 3
Knuth-Morris-Pratt

If symbols don’t match, and the current symbol in $P$ is $i = 1$, align $F(i)$ in $P$ with the next symbol in $T$

Comparisons: 4
Knuth-Morris-Pratt

If symbols don’t match, and the current symbol in $P$ is $i = 1$, align $F(i)$ in $P$ with the next symbol in $T$

Comparisons: 5
Knuth-Morris-Pratt

If symbols match, compare the next symbols in both $P$ and $T$

Comparisons: 6
Knuth-Morris-Pratt

If symbols match, compare the next symbols in both $P$ and $T$

Comparisons: 7
If symbols match, compare the next symbols in both $P$ and $T$

Comparisons: 8
Knuth-Morris-Pratt

If symbols match, compare the next symbols in both $P$ and $T$

Comparisons: 9
Knuth-Morris-Pratt

If symbols match, compare the next symbols in both $P$ and $T$

Comparisons: 10
When full match is found, align $F(|P| + 1)$ in $P$ with the next symbol in $T$

Comparisons: 11
If symbols don’t match, and the current symbol in $P$ is $i = 1$, align $F(i)$ in $P$ with the next symbol in $T$.

Comparisons: 12
If symbols don’t match, and the current symbol in $P$ is $i = 1$, align $F(i)$ in $P$ with the next symbol in $T$.

Comparisons: 13
If symbols don’t match, and the current symbol in $P$ is $i = 1$, align $F(i)$ in $P$ with the next symbol in $T$

Comparisons: 14
If symbols don’t match, and the current symbol in $P$ is $i = 1$, align $F(i)$ in $P$ with the next symbol in $T$.

Comparisons: 15
If symbols match, compare the next symbols in both $P$ and $T$

Comparisons: 16
If symbols match, compare the next symbols in both $P$ and $T$

Comparisons: 17
If symbols match, compare the next symbols in both $P$ and $T$

Comparisons: 18
Knuth-Morris-Pratt

If symbols match, compare the next symbols in both $P$ and $T$

Comparisons: 19
If symbols match, compare the next symbols in both $P$ and $T$

Comparisons: 20
If symbols don’t match, and the current symbol in $P$ is $i > 1$, align $F(i)$ in $P$ with the current symbol in $T$. Comparisons: 21
If symbols don’t match, and the current symbol in $P$ is $i > 1$, align $F(i)$ in $P$ with the current symbol in $T$.

Comparisons: 22
If symbols don’t match, and the current symbol in $P$ is $i = 1$, align $F(i)$ in $P$ with the next symbol in $T$

Comparisons: 23