Naive algorithm

Align both strings at their beginning position and begin comparing

Comparisons: 1
Naive algorithm

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

Comparisons: 2
Naive algorithm

If symbols don’t match, advance $P$ by one position and begin comparing from beginning of $P$

Comparisons: 3
Naive algorithm

If symbols don’t match, advance $P$ by one position and begin comparing from beginning of $P$

Comparisons: 4
Naive algorithm

If symbols don’t match, advance $P$ by one position and begin comparing from beginning of $P$

Comparisons: 5
Naive algorithm

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

Comparisons: 6
Naive algorithm

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

Comparisons: 7
Naive algorithm

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

Comparisons: 8
Naive algorithm

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

Comparisons: 9
Naive algorithm

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

Comparisons: 10
Naive algorithm

When full match is found, mark \( P \) as found in \( T \), advance \( P \) by one and compare from beginning of \( P \)

Comparisons: 11
Naive algorithm

If symbols don’t match, advance $P$ by one position and begin comparing from beginning of $P$

Comparisons: 12
Naive algorithm

If symbols don’t match, advance $P$ by one position and begin comparing from beginning of $P$

Comparisons: 13
Naive algorithm

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

Comparisons: 14
Naive algorithm

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

Comparisons: 15
Naive algorithm

If symbols don’t match, advance $P$ by one position and begin comparing from beginning of $P$

Comparisons: 16
Naive algorithm

If symbols don’t match, advance \( P \) by one position and begin comparing from beginning of \( P \)

Comparisons: 17
Naive algorithm

If symbols don’t match, advance $P$ by one position and begin comparing from beginning of $P$

Comparisons: 18
Naive algorithm

If symbols don’t match, advance $P$ by one position and begin comparing from beginning of $P$

Comparisons: 19
Naive algorithm

If symbols don’t match, advance $P$ by one position and begin comparing from beginning of $P$

Comparisons: 20
Naive algorithm

If symbols don’t match, advance $P$ by one position and begin comparing from beginning of $P$

Comparisons: 21
Naive algorithm

If symbols don’t match, advance $P$ by one position and begin comparing from beginning of $P$

Comparisons: 22
Naive algorithm

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

Comparisons: 23
Naive algorithm

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

Comparisons: 24
Naive algorithm

If symbols match, compare the next symbols in both \( P \) and \( T \)

Comparisons: 25
Naive algorithm

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

Comparisons: 26
Naive algorithm

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

Comparisons: 27
Naive algorithm

If symbols don’t match, advance $P$ by one position and begin comparing from beginning of $P$

Comparisons: 28
Naive algorithm

If symbols don’t match, advance $P$ by one position and begin comparing from beginning of $P$

Comparisons: 29
Naive algorithm

x l u x t p x t d q w t d x t p x t s y x t p x t d y
  x t p x t d
  ↑

If symbols don’t match, advance $P$ by one position and begin comparing from beginning of $P$

Comparisons: 30
Naive algorithm

If symbols match, compare the next symbols in both \(P\) and \(T\)

Comparisons: 31
Naive algorithm

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

Comparisons: 32
Naive algorithm

x l u x t p x t d q w t d x t p x t s y x t p x t d y
   x t p x t d
   ↑

If symbols don’t match, advance $P$ by one position and begin comparing from beginning of $P$

Comparisons: 33
Naive algorithm

If symbols don’t match, advance $P$ by one position and begin comparing from beginning of $P$

Comparisons: 34
Naive algorithm

If symbols don’t match, advance $P$ by one position and begin comparing from beginning of $P$

Comparisons: 35
**Naive algorithm**

If symbols don’t match, advance $P$ by one position and begin comparing from beginning of $P$

Comparisons: 36
Naive algorithm

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

Comparisons: 37
Naive algorithm

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

Comparisons: 38
Naive algorithm

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

Comparisons: 39
Naive algorithm

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

Comparisons: 40
Naive algorithm

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

Comparisons: 41
Naive algorithm

When full match is found, mark $P$ as found in $T$, advance $P$ by one and compare from beginning of $P$

Comparisons: 42

Finish when $P$ should be advanced, but is right aligned with $T$