Naive's algorithm

• It is used for pattern matching .

Text - ABCABDAABC

Pattern - ABD

Working

$$T = \begin{bmatrix} 0 & 1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 \\ A & B & C & A & B & D & A & A & B & C \end{bmatrix}$$

$$P = \begin{bmatrix} A & B & D \end{bmatrix}$$

Step-1

$$T = \begin{bmatrix} A & B & C & A & B & D & A & A & B & C \end{bmatrix}$$

$$P = A B D$$

$$P = A B D$$

Total Comparisons = 3

Step-2

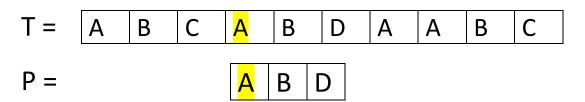
$$P = A B D$$

No. Of comparisons = Previous Comp + Present Comp

Step-3

No.of comp = $4+1 \rightarrow 5$

Step-4



$$T = \begin{bmatrix} A & B & C & A & B & D & A & A & B & C \end{bmatrix}$$

$$\begin{bmatrix} A & B & D & A & A & B & C \end{bmatrix}$$

Analyze and apply the naive-string matching algorithm for the following pattern and text:

pattern: A A A A A A B