

BOYER MOORE:

T \rightarrow A I N A I S E S T I Z A I N A I N E N.

P \rightarrow A I N A I N E N
0 1 2 3 4 5 6 7 } 8

\Rightarrow create a Bad character table.

* : size of pattern.

last element of = size of the
pattern value pattern.

\gg Bad character table

	A	I	N	E	*
value \rightarrow	4	3	8	1	8

$$\begin{aligned} v(E) &= 8/4 \text{ length of pattern} - \text{index} - 1. \\ &= 8 - 6 - 1 \\ &= 1 // \end{aligned}$$

$$\begin{aligned} v(I) &= 8 - 4 - 1 \\ &= 3 // \end{aligned}$$

$$\begin{aligned} v(A) &= 8 - 3 - 1 \\ &= 4 // \end{aligned}$$

pattern: ~~W~~ I N E *

4 3 8 1 8.

~~11~~

compare:

T: ~~W~~ I N A I S E S

P: ~~W~~ I N A I N E N

no matching.

compare S no in

bad character, if

not present then take

the '*' value.

$S = * = 8.$

jump 8 values forward
in 'T'.

↓

T: T I 2 A I N A I

P: ~~W~~ I N A I N E N

no matching.

I = 3 in bad

character.

jump 3 forward

↓

T: ~~W~~ I N A I N E N

P: ~~W~~ I N A I N E N

→ matching.

2) T: M I E L C O M E T O K L E
 P: T O K L E
 0 1 2 3 4

» bad character table.

T O K L E
 4 3 2 1 5 5

$$V(L) = 5 - 3 - 1 \\ = 1$$

$$V(O) = 5 - 1 - 1 \\ = 3$$

$$V(K) = 5 - 2 - 1 \\ = 2$$

$$V(T) = 5 - 0 - 1 \\ = 4$$

T: M I E L C O
 P: T O K L E

no matching

O = 3 : jump forward

T: C O M E (T) → no matching.

P: T O K L (E)

↓
 (T=4) → jump forward.

T: T O K L E → matching

P: T O K L E

3) T: WELCOME TO KLE COLLEGE
 P: COLLEGE

Bad character table

⇒

C	O	L	E	⊕
6	5	3	7	1

$$u(e) = 7 - 5 - 1 = 1$$

$$u(L) = 7 - 3 - 1 = 3$$

$$u(O) = 7 - 1 - 1 = 5$$

$$u(C) = 7 - 0 - 1 = 6$$

compare:

T: WELCOME TO KLE COLLEGE
 P: COLLEGE

→ matching

→ not matching.

↓ last character of a comparing table.
 $m = 7$

jump forward

T: T O K L E C O
 P: C O L L E G E

↓
 $O = 5$

jump forward

T: C O L L E G E
 P: C O L L E G E

↓
matching.

NOTE:

x	x	x	x	x	e	0
x	x	x	x	x	e	M

no match.

0 = value from bad character table, (if present)

(or)

if no, then $0 = *$.

$e = 0$

x	x	x	x	e	0	→ matching
x	x	x	x	M	0	

↓ no match. ↓

then e = value of last character in 'T'

i.e ; $e = 0$