Nama : Yusuf Kalla

Nim : 211401102

Lab ; DAA(6)

Text = ASRAAEEAARAEAERAEAAEREEEARAERREEEAAAAEREERERERREAA

Pattern = REEEA

REEEA, Length = m = 5

i=0;

    j=kmpNext[0]=-1;

    while (i<m)

    {

        while (j>-1&&x[i]!=x[j])

        {

            j=kmpNext[j];

        }

        i++;

        j++;

        if(x[i]==x[j])

        {

            kmpNext[i]=kmpNext[j];

        }

        else

        {

            kmpNext[i]=j;

        }

    }

Ditentukan kmpnext pada index 0 adalah -1

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| R | E | E | E | A |
| -1 |  |  |  |  |

Dikarenakan i **(0)** < m **(5)** terpenuhi tetapi tidak dengan j **(-1)** > -1 maka nilai i dan j ditambah 1 menjadi

i = 1 , j = 0

lalu karena x[1] **(E)** tidak sama dengan x[0] **(R)**

maka dijalankan

kmpnext [1] = 0

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| R | E | E | E | A |
| -1 | 0 |  |  |  |

Dikarenakan i **(1)** < m **(5)** dan x[1] **(E)** != x[0] **(R)** terpenuhi maka nilai j = kmpnext[0] **(-1)** lalu i dan j ditambah 1

i = 2 , j = 0

lalu karena x[2] **(E)** tidak sama dengan x[0] **(R)**

maka dijalankan

kmpnext [2] = 0

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| R | E | E | E | A |
| -1 | 0 | 0 |  |  |

Dikarenakan i **(2)** < m **(5)** dan x[2] **(E)** != x[0] **(R)** terpenuhi maka nilai j = kmpnext[0] **(-1)** lalu i dan j ditambah 1

i = 3 , j = 0

lalu karena x[3] **(E)** tidak sama dengan x[0] **(R)**

maka dijalankan

kmpnext [3] = 0

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| R | E | E | E | A |
| -1 | 0 | 0 | 0 |  |

Dikarenakan i **(3)** < m **(5)** dan x[3] **(E)** != x[0] **(R)** terpenuhi maka nilai j = kmpnext[0] **(-1)** lalu i dan j ditambah 1

i = 4 , j = 0

lalu karena x[4] **(A)** tidak sama dengan x[0] **(R)**

maka dijalankan

kmpnext [4] = 0

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| R | E | E | E | A | - |
| -1 | 0 | 0 | 0 | 0 | 0 |

Dikarenakan i **(4)** < m **(5)** dan x[4] **(E)** != x[0] **(R)** terpenuhi maka nilai j = kmpnext[0] **(-1)** lalu i dan j ditambah 1

i = 5 , j = 0

lalu karena x[5] **(-)** tidak sama dengan x[0] **(R)**

maka dijalankan

kmpnext [5] = 0

Maka didapatkan Tabel KmpNext

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| R | E | E | E | A | - |
| -1 | 0 | 0 | 0 | 0 | 0 |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| A | S | R | A | A | E | E | A | A | R | A | E | A | E | R | A | E | A | A | E | R | E | E | E | A | R | A | E | R | R | E | E | E | A | A | A | A | E | R | E | E | R | E | R | E | R | R | E | A | A |
| R | E | E | E | A |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Untuk Proses pencarian kita akan mengcompare 1 per 1 tiap huruf

Pencarian

Salah pada index ke 0 sehingga digeser sebanyak

i – KmpNext[i] = 0 – (-1) = 1 kotak

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| A | S | R | A | A | E | E | A | A | R | A | E | A | E | R | A | E | A | A | E | R | E | E | E | A | R | A | E | R | R | E | E | E | A | A | A | A | E | R | E | E | R | E | R | E | R | R | E | A | A |
|  | R | E | E | E | A |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Salah pada index ke 0 sehingga digeser sebanyak

i – KmpNext[i] = 0 – (-1) = 1 kotak

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| A | S | R | A | A | E | E | A | A | R | A | E | A | E | R | A | E | A | A | E | R | E | E | E | A | R | A | E | R | R | E | E | E | A | A | A | A | E | R | E | E | R | E | R | E | R | R | E | A | A |
|  |  | R | E | E | E | A |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Salah pada index ke 1 sehingga digeser sebanyak

i – KmpNext[i] = 1 – 0 = 1 kotak

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| A | S | R | A | A | E | E | A | A | R | A | E | A | E | R | A | E | A | A | E | R | E | E | E | A | R | A | E | R | R | E | E | E | A | A | A | A | E | R | E | E | R | E | R | E | R | R | E | A | A |
|  |  |  | R | E | E | E | A |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Salah pada index ke 0 sehingga digeser sebanyak

i – KmpNext[i] = 0 – (-1) = 1 kotak

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| A | S | R | A | A | E | E | A | A | R | A | E | A | E | R | A | E | A | A | E | R | E | E | E | A | R | A | E | R | R | E | E | E | A | A | A | A | E | R | E | E | R | E | R | E | R | R | E | A | A |
|  |  |  |  | R | E | E | E | A |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Salah pada index ke 0 sehingga digeser sebanyak

i – KmpNext[i] = 0 – (-1) = 1 kotak

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| A | S | R | A | A | E | E | A | A | R | A | E | A | E | R | A | E | A | A | E | R | E | E | E | A | R | A | E | R | R | E | E | E | A | A | A | A | E | R | E | E | R | E | R | E | R | R | E | A | A |
|  |  |  |  |  | R | E | E | E | A |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Salah pada index ke 0 sehingga digeser sebanyak

i – KmpNext[i] = 0 – (-1) = 1 kotak

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| A | S | R | A | A | E | E | A | A | R | A | E | A | E | R | A | E | A | A | E | R | E | E | E | A | R | A | E | R | R | E | E | E | A | A | A | A | E | R | E | E | R | E | R | E | R | R | E | A | A |
|  |  |  |  |  |  | R | E | E | E | A |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Salah pada index ke 0 sehingga digeser sebanyak

i – KmpNext[i] = 0 – (-1) = 1 kotak

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| A | S | R | A | A | E | E | A | A | R | A | E | A | E | R | A | E | A | A | E | R | E | E | E | A | R | A | E | R | R | E | E | E | A | A | A | A | E | R | E | E | R | E | R | E | R | R | E | A | A |
|  |  |  |  |  |  |  | R | E | E | E | A |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Salah pada index ke 0 sehingga digeser sebanyak

i – KmpNext[i] = 0 – (-1) = 1 kotak

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| A | S | R | A | A | E | E | A | A | R | A | E | A | E | R | A | E | A | A | E | R | E | E | E | A | R | A | E | R | R | E | E | E | A | A | A | A | E | R | E | E | R | E | R | E | R | R | E | A | A |
|  |  |  |  |  |  |  |  | R | E | E | E | A |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Salah pada index ke 0 sehingga digeser sebanyak

i – KmpNext[i] = 0 – (-1) = 1 kotak

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| A | S | R | A | A | E | E | A | A | R | A | E | A | E | R | A | E | A | A | E | R | E | E | E | A | R | A | E | R | R | E | E | E | A | A | A | A | E | R | E | E | R | E | R | E | R | R | E | A | A |
|  |  |  |  |  |  |  |  |  | R | E | E | E | A |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Salah pada index ke 1 sehingga digeser sebanyak

i – KmpNext[i] = 1 – 0 = 1 kotak

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| A | S | R | A | A | E | E | A | A | R | A | E | A | E | R | A | E | A | A | E | R | E | E | E | A | R | A | E | R | R | E | E | E | A | A | A | A | E | R | E | E | R | E | R | E | R | R | E | A | A |
|  |  |  |  |  |  |  |  |  |  | R | E | E | E | A |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Salah pada index ke 0 sehingga digeser sebanyak

i – KmpNext[i] = 0 – (-1) = 1 kotak

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| A | S | R | A | A | E | E | A | A | R | A | E | A | E | R | A | E | A | A | E | R | E | E | E | A | R | A | E | R | R | E | E | E | A | A | A | A | E | R | E | E | R | E | R | E | R | R | E | A | A |
|  |  |  |  |  |  |  |  |  |  |  | R | E | E | E | A |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Salah pada index ke 0 sehingga digeser sebanyak

i – KmpNext[i] = 0 – (-1) = 1 kotak

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| A | S | R | A | A | E | E | A | A | R | A | E | A | E | R | A | E | A | A | E | R | E | E | E | A | R | A | E | R | R | E | E | E | A | A | A | A | E | R | E | E | R | E | R | E | R | R | E | A | A |
|  |  |  |  |  |  |  |  |  |  |  |  | R | E | E | E | A |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Salah pada index ke 0 sehingga digeser sebanyak

i – KmpNext[i] = 0 – (-1) = 1 kotak

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| A | S | R | A | A | E | E | A | A | R | A | E | A | E | R | A | E | A | A | E | R | E | E | E | A | R | A | E | R | R | E | E | E | A | A | A | A | E | R | E | E | R | E | R | E | R | R | E | A | A |
|  |  |  |  |  |  |  |  |  |  |  |  |  | R | E | E | E | A |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Salah pada index ke 0 sehingga digeser sebanyak

i – KmpNext[i] = 0 – (-1) = 1 kotak

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| A | S | R | A | A | E | E | A | A | R | A | E | A | E | R | A | E | A | A | E | R | E | E | E | A | R | A | E | R | R | E | E | E | A | A | A | A | E | R | E | E | R | E | R | E | R | R | E | A | A |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | R | E | E | E | A |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Salah pada index ke 1 sehingga digeser sebanyak

i – KmpNext[i] = 1 – 0 = 1 kotak

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| A | S | R | A | A | E | E | A | A | R | A | E | A | E | R | A | E | A | A | E | R | E | E | E | A | R | A | E | R | R | E | E | E | A | A | A | A | E | R | E | E | R | E | R | E | R | R | E | A | A |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | R | E | E | E | A |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Salah pada index ke 0 sehingga digeser sebanyak

i – KmpNext[i] = 0 – (-1) = 1 kotak

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| A | S | R | A | A | E | E | A | A | R | A | E | A | E | R | A | E | A | A | E | R | E | E | E | A | R | A | E | R | R | E | E | E | A | A | A | A | E | R | E | E | R | E | R | E | R | R | E | A | A |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | R | E | E | E | A |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Salah pada index ke 0 sehingga digeser sebanyak

i – KmpNext[i] = 0 – (-1) = 1 kotak

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| A | S | R | A | A | E | E | A | A | R | A | E | A | E | R | A | E | A | A | E | R | E | E | E | A | R | A | E | R | R | E | E | E | A | A | A | A | E | R | E | E | R | E | R | E | R | R | E | A | A |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | R | E | E | E | A |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Salah pada index ke 0 sehingga digeser sebanyak

i – KmpNext[i] = 0 – (-1) = 1 kotak

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| A | S | R | A | A | E | E | A | A | R | A | E | A | E | R | A | E | A | A | E | R | E | E | E | A | R | A | E | R | R | E | E | E | A | A | A | A | E | R | E | E | R | E | R | E | R | R | E | A | A |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | R | E | E | E | A |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Salah pada index ke 0 sehingga digeser sebanyak

i – KmpNext[i] = 0 – (-1) = 1 kotak

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| A | S | R | A | A | E | E | A | A | R | A | E | A | E | R | A | E | A | A | E | R | E | E | E | A | R | A | E | R | R | E | E | E | A | A | A | A | E | R | E | E | R | E | R | E | R | R | E | A | A |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | R | E | E | E | A |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Salah pada index ke 0 sehingga digeser sebanyak

i – KmpNext[i] = 0 – (-1) = 1 kotak

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| A | S | R | A | A | E | E | A | A | R | A | E | A | E | R | A | E | A | A | E | R | E | E | E | A | R | A | E | R | R | E | E | E | A | A | A | A | E | R | E | E | R | E | R | E | R | R | E | A | A |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | R | E | E | E | A |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Didapatkan kesaaman yang memenuhi kelima index pattern pada index ke 20 kata sehingga bergeser sebanyak banyak index pattern yaitu 5

i – KmpNext[i] = 5 – 0 = 5 kotak

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| A | S | R | A | A | E | E | A | A | R | A | E | A | E | R | A | E | A | A | E | R | E | E | E | A | R | A | E | R | R | E | E | E | A | A | A | A | E | R | E | E | R | E | R | E | R | R | E | A | A |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | R | E | E | E | A |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Salah pada index ke 1 sehingga digeser sebanyak

i – KmpNext[i] = 1 – 0 = 1 kotak

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| A | S | R | A | A | E | E | A | A | R | A | E | A | E | R | A | E | A | A | E | R | E | E | E | A | R | A | E | R | R | E | E | E | A | A | A | A | E | R | E | E | R | E | R | E | R | R | E | A | A |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | R | E | E | E | A |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Salah pada index ke 0 sehingga digeser sebanyak

i – KmpNext[i] = 0 – (-1) = 1 kotak

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| A | S | R | A | A | E | E | A | A | R | A | E | A | E | R | A | E | A | A | E | R | E | E | E | A | R | A | E | R | R | E | E | E | A | A | A | A | E | R | E | E | R | E | R | E | R | R | E | A | A |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | R | E | E | E | A |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Salah pada index ke 0 sehingga digeser sebanyak

i – KmpNext[i] = 0 – (-1) = 1 kotak

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| A | S | R | A | A | E | E | A | A | R | A | E | A | E | R | A | E | A | A | E | R | E | E | E | A | R | A | E | R | R | E | E | E | A | A | A | A | E | R | E | E | R | E | R | E | R | R | E | A | A |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | R | E | E | E | A |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Salah pada index ke 1 sehingga digeser sebanyak

i – KmpNext[i] = 1 – 0 = 1 kotak

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| A | S | R | A | A | E | E | A | A | R | A | E | A | E | R | A | E | A | A | E | R | E | E | E | A | R | A | E | R | R | E | E | E | A | A | A | A | E | R | E | E | R | E | R | E | R | R | E | A | A |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | R | E | E | E | A |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Didapatkan kesaaman yang memenuhi kelima index pattern pada index ke 29 kata sehingga bergeser sebanyak banyak index pattern yaitu 5

i – KmpNext[i] = 5 – 0 = 5 kotak

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| A | S | R | A | A | E | E | A | A | R | A | E | A | E | R | A | E | A | A | E | R | E | E | E | A | R | A | E | R | R | E | E | E | A | A | A | A | E | R | E | E | R | E | R | E | R | R | E | A | A |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | R | E | E | E | A |  |  |  |  |  |  |  |  |  |  |  |

Salah pada index ke 0 sehingga digeser sebanyak

i – KmpNext[i] = 0 – (-1) = 1 kotak

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| A | S | R | A | A | E | E | A | A | R | A | E | A | E | R | A | E | A | A | E | R | E | E | E | A | R | A | E | R | R | E | E | E | A | A | A | A | E | R | E | E | R | E | R | E | R | R | E | A | A |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | R | E | E | E | A |  |  |  |  |  |  |  |  |  |  |

Salah pada index ke 0 sehingga digeser sebanyak

i – KmpNext[i] = 0 – (-1) = 1 kotak

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| A | S | R | A | A | E | E | A | A | R | A | E | A | E | R | A | E | A | A | E | R | E | E | E | A | R | A | E | R | R | E | E | E | A | A | A | A | E | R | E | E | R | E | R | E | R | R | E | A | A |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | R | E | E | E | A |  |  |  |  |  |  |  |  |  |

Salah pada index ke 0 sehingga digeser sebanyak

i – KmpNext[i] = 0 – (-1) = 1 kotak

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| A | S | R | A | A | E | E | A | A | R | A | E | A | E | R | A | E | A | A | E | R | E | E | E | A | R | A | E | R | R | E | E | E | A | A | A | A | E | R | E | E | R | E | R | E | R | R | E | A | A |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | R | E | E | E | A |  |  |  |  |  |  |  |  |

Salah pada index ke 0 sehingga digeser sebanyak

i – KmpNext[i] = 0 – (-1) = 1 kotak

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| A | S | R | A | A | E | E | A | A | R | A | E | A | E | R | A | E | A | A | E | R | E | E | E | A | R | A | E | R | R | E | E | E | A | A | A | A | E | R | E | E | R | E | R | E | R | R | E | A | A |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | R | E | E | E | A |  |  |  |  |  |  |  |

Salah pada index ke 3 sehingga digeser sebanyak

i – KmpNext[i] = 3 – 0 = 3 kotak

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| A | S | R | A | A | E | E | A | A | R | A | E | A | E | R | A | E | A | A | E | R | E | E | E | A | R | A | E | R | R | E | E | E | A | A | A | A | E | R | E | E | R | E | R | E | R | R | E | A | A |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | R | E | E | E | A |  |  |  |  |

Salah pada index ke 2 sehingga digeser sebanyak

i – KmpNext[i] = 2 – 0 = 2 kotak

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| A | S | R | A | A | E | E | A | A | R | A | E | A | E | R | A | E | A | A | E | R | E | E | E | A | R | A | E | R | R | E | E | E | A | A | A | A | E | R | E | E | R | E | R | E | R | R | E | A | A |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | R | E | E | E | A |  |  |

Salah pada index ke 2 sehingga digeser sebanyak

i – KmpNext[i] = 2 – 0 = 2 kotak

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A | S | R | A | A | E | E | A | A | R | A | E | A | E | R | A | E | A | A | E | R | E | E | E | A | R | A | E | R | R | E | E | E | A | A | A | A | E | R | E | E | R | E | R | E | R | R | E | A | A |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | R | E | E | E | A |

Salah pada index ke 1 sehingga digeser sebanyak

i – KmpNext[i] = 1 – 0 = 1 kotak

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A | S | R | A | A | E | E | A | A | R | A | E | A | E | R | A | E | A | A | E | R | E | E | E | A | R | A | E | R | R | E | E | E | A | A | A | A | E | R | E | E | R | E | R | E | R | R | E | A | A |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | R | E | E | E | A |

Sudah Melebihi banyak kata sehingga pencarian berhenti

Sehingga didapatkan pattern REEEA pada kata diatas sebanyak 2 kali pada index ke 20 dan 29

Dari sini dapat kita lihat pembuktian bagaimana suatu pattern itu dapat ditemukan atau tidak dengan metode KMP pada suatu kata