Characters : ESAEXCALIBURAEXALAEEXASASDEXALEXCALIAEAXASXEXCAEAS

Pattern : EXCALIBUR

EXCALIBUR.Length() = m = 9

void preKmp(string x, int m, int kmpNext[]){

    int i, j;

    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 i = 0 dan j = kmpNext[0] = -1

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| E | X | C | A | L | I | B | U | R |
| -1 |  |  |  |  |  |  |  |  |

i (0) < m (9) terpenuhi, tetapi tidak dengan j (-1) > -1, maka nilai i dan j ditambah menjadi i = 1 dan j = 0

selanjutnya karena x[1] (X) tidak sama dengan x[0] (E), maka dijalankan kmpNext[1] = 0;

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| E | X | C | A | L | I | B | U | R |
| -1 | 0 |  |  |  |  |  |  |  |

Lalu, karena i(1) < m(9) dan j(0) > -1 dan x[1](X) != x[0](E) terpenuhi, maka nilai j = kmpnext[0](-1) lalu i dan j ditambah 1 : i = 2 dan j = 0

Lalu karena x[2] (C) tidak sama dengan x[0] (E), maka dijalankan kmpnext[2] = 0

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| E | X | C | A | L | I | B | U | R |
| -1 | 0 | 0 |  |  |  |  |  |  |

Selanjutnya, karena i(2) < m(9) dan j(0) > -1 dan x[2](C) != x[0](E) terpenuhi, maka nilai j = kmpnext[0](-1) lalu i dan j ditambah 1 : i = 3 dan j = 0

Lalu karena x[3] (A) tidak sama dengan x[0] (E), maka dijalankan kmpnext[3] = 0

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| E | X | C | A | L | I | B | U | R |
| -1 | 0 | 0 | 0 |  |  |  |  |  |

Selanjutnya, karena i(3) < m(9) dan j(0) > -1 dan x[3](A) != x[0](E) terpenuhi, maka nilai j = kmpnext[0](-1) lalu i dan j ditambah 1 : i = 4 dan j = 0

Lalu karena x[4] (L) tidak sama dengan x[0] (E), maka dijalankan kmpnext[4] = 0

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| E | X | C | A | L | I | B | U | R |
| -1 | 0 | 0 | 0 | 0 |  |  |  |  |

Selanjutnya, karena i(4) < m(9) dan j(0) > -1 dan x[4](L) != x[0](E) terpenuhi, maka nilai j = kmpnext[0](-1) lalu i dan j ditambah 1 : i = 5 dan j = 0

Lalu karena x[5] (I) tidak sama dengan x[0] (E), maka dijalankan kmpnext[5] = 0

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| E | X | C | A | L | I | B | U | R |
| -1 | 0 | 0 | 0 | 0 | 0 |  |  |  |

Selanjutnya, karena i(5) < m(9) dan j(0) > -1 dan x[5](I) != x[0](E) terpenuhi, maka nilai j = kmpnext[0](-1) lalu i dan j ditambah 1 : i = 6 dan j = 0

Lalu karena x[6] (B) tidak sama dengan x[0] (E), maka dijalankan kmpnext[6] = 0

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| E | X | C | A | L | I | B | U | R |
| -1 | 0 | 0 | 0 | 0 | 0 | 0 |  |  |

Selanjutnya, karena i(6) < m(9) dan j(0) > -1 dan x[6](B) != x[0](E) terpenuhi, maka nilai j = kmpnext[0](-1) lalu i dan j ditambah 1 : i = 7 dan j = 0

Lalu karena x[7] (U) tidak sama dengan x[0] (E), maka dijalankan kmpnext[7] = 0

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| E | X | C | A | L | I | B | U | R |
| -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |

Selanjutnya, karena i(7) < m(9) dan j(0) > -1 dan x[7](U) != x[0](E) terpenuhi, maka nilai j = kmpnext[0](-1) lalu i dan j ditambah 1 : i = 8 dan j = 0

Lalu karena x[8] (R) tidak sama dengan x[0] (E), maka dijalankan kmpnext[8] = 0

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| E | X | C | A | L | I | B | U | R |
| -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Selanjutnya, karena i(8) < m(9) dan j(0) > -1 dan x[8](R) != x[0](E) terpenuhi, maka nilai j = kmpnext[0](-1) lalu i dan j ditambah 1 : i = 9 dan j = 0

Lalu karena x[9] (-) tidak sama dengan x[0] (E), maka dijalankan kmpnext[9] = 0 dan dapatlah tabel kmpNext-nya

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| E | X | C | A | L | I | B | U | R | - |
| -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Untuk proses pencarian katanya, kita akan compare 1 per 1 tiap karakter

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **E** | **S** | **A** | **E** | **X** | **C** | **A** | **L** | **I** | **B** | **U** | **R** | **A** | **E** | **X** | **A** | **L** | **A** | **E** | **E** | **X** | **A** | **S** | **A** | **S** | **D** | **E** | **X** | **A** | **L** | **E** | **X** | **C** | **A** | **L** | **I** | **A** | **E** | **A** | **X** | **A** | **S** | **X** | **E** | **X** | **C** | **A** | **E** | **A** | **S** |
| **E** | **X** | **C** | **A** | **L** | **I** | **B** | **U** | **R** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Salah pada index ke 1 sehingga digeser sebanyak

i – kmpNext[i]=1 – (-1) = 2 kotak

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **E** | **S** | **A** | **E** | **X** | **C** | **A** | **L** | **I** | **B** | **U** | **R** | **A** | **E** | **X** | **A** | **L** | **A** | **E** | **E** | **X** | **A** | **S** | **A** | **S** | **D** | **E** | **X** | **A** | **L** | **E** | **X** | **C** | **A** | **L** | **I** | **A** | **E** | **A** | **X** | **A** | **S** | **X** | **E** | **X** | **C** | **A** | **E** | **A** | **S** |
|  |  | **E** | **X** | **C** | **A** | **L** | **I** | **B** | **U** | **R** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Salah pada index ke 0 sehingga digeser sebanyak

i – kmpNext[i]=0 – (-1) = 1 kotak

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **E** | **S** | **A** | **E** | **X** | **C** | **A** | **L** | **I** | **B** | **U** | **R** | **A** | **E** | **X** | **A** | **L** | **A** | **E** | **E** | **X** | **A** | **S** | **A** | **S** | **D** | **E** | **X** | **A** | **L** | **E** | **X** | **C** | **A** | **L** | **I** | **A** | **E** | **A** | **X** | **A** | **S** | **X** | **E** | **X** | **C** | **A** | **E** | **A** | **S** |
|  |  |  | **E** | **X** | **C** | **A** | **L** | **I** | **B** | **U** | **R** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Didapatkan kesamaan yang memenuhi kesembilan index pattern sehingga bergeser sebanyak banyak index pattern yaitu 9

i – kmpNext[i]=9 - 0 = 9 kotak

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **E** | **S** | **A** | **E** | **X** | **C** | **A** | **L** | **I** | **B** | **U** | **R** | **A** | **E** | **X** | **A** | **L** | **A** | **E** | **E** | **X** | **A** | **S** | **A** | **S** | **D** | **E** | **X** | **A** | **L** | **E** | **X** | **C** | **A** | **L** | **I** | **A** | **E** | **A** | **X** | **A** | **S** | **X** | **E** | **X** | **C** | **A** | **E** | **A** | **S** |
|  |  |  |  |  |  |  |  |  |  |  |  | **E** | **X** | **C** | **A** | **L** | **I** | **B** | **U** | **R** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Salah pada index ke 0 sehingga digeser sebanyak

i – kmpNext[i]=0 – (-1) = 1 kotak

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **E** | **S** | **A** | **E** | **X** | **C** | **A** | **L** | **I** | **B** | **U** | **R** | **A** | **E** | **X** | **A** | **L** | **A** | **E** | **E** | **X** | **A** | **S** | **A** | **S** | **D** | **E** | **X** | **A** | **L** | **E** | **X** | **C** | **A** | **L** | **I** | **A** | **E** | **A** | **X** | **A** | **S** | **X** | **E** | **X** | **C** | **A** | **E** | **A** | **S** |
|  |  |  |  |  |  |  |  |  |  |  |  |  | **E** | **X** | **C** | **A** | **L** | **I** | **B** | **U** | **R** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Salah pada index ke 2 sehingga digeser sebanyak

i – kmpNext[i]=2 – 0 = 2 kotak

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **E** | **S** | **A** | **E** | **X** | **C** | **A** | **L** | **I** | **B** | **U** | **R** | **A** | **E** | **X** | **A** | **L** | **A** | **E** | **E** | **X** | **A** | **S** | **A** | **S** | **D** | **E** | **X** | **A** | **L** | **E** | **X** | **C** | **A** | **L** | **I** | **A** | **E** | **A** | **X** | **A** | **S** | **X** | **E** | **X** | **C** | **A** | **E** | **A** | **S** |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | **E** | **X** | **C** | **A** | **L** | **I** | **B** | **U** | **R** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Salah pada index ke 0 sehingga digeser sebanyak

i – kmpNext[i]=0 – (-1) = 1 kotak

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **E** | **S** | **A** | **E** | **X** | **C** | **A** | **L** | **I** | **B** | **U** | **R** | **A** | **E** | **X** | **A** | **L** | **A** | **E** | **E** | **X** | **A** | **S** | **A** | **S** | **D** | **E** | **X** | **A** | **L** | **E** | **X** | **C** | **A** | **L** | **I** | **A** | **E** | **A** | **X** | **A** | **S** | **X** | **E** | **X** | **C** | **A** | **E** | **A** | **S** |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | **E** | **X** | **C** | **A** | **L** | **I** | **B** | **U** | **R** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Salah pada index ke 0 sehingga digeser sebanyak

i – kmpNext[i]=0 – (-1) = 1 kotak

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **E** | **S** | **A** | **E** | **X** | **C** | **A** | **L** | **I** | **B** | **U** | **R** | **A** | **E** | **X** | **A** | **L** | **A** | **E** | **E** | **X** | **A** | **S** | **A** | **S** | **D** | **E** | **X** | **A** | **L** | **E** | **X** | **C** | **A** | **L** | **I** | **A** | **E** | **A** | **X** | **A** | **S** | **X** | **E** | **X** | **C** | **A** | **E** | **A** | **S** |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | **E** | **X** | **C** | **A** | **L** | **I** | **B** | **U** | **R** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Salah pada index ke 0 sehingga digeser sebanyak

i – kmpNext[i]=0 – (-1) = 1 kotak

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **E** | **S** | **A** | **E** | **X** | **C** | **A** | **L** | **I** | **B** | **U** | **R** | **A** | **E** | **X** | **A** | **L** | **A** | **E** | **E** | **X** | **A** | **S** | **A** | **S** | **D** | **E** | **X** | **A** | **L** | **E** | **X** | **C** | **A** | **L** | **I** | **A** | **E** | **A** | **X** | **A** | **S** | **X** | **E** | **X** | **C** | **A** | **E** | **A** | **S** |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | **E** | **X** | **C** | **A** | **L** | **I** | **B** | **U** | **R** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Salah pada index ke 1 sehingga digeser sebanyak

i – kmpNext[i]=1 – 0 = 1 kotak

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **E** | **S** | **A** | **E** | **X** | **C** | **A** | **L** | **I** | **B** | **U** | **R** | **A** | **E** | **X** | **A** | **L** | **A** | **E** | **E** | **X** | **A** | **S** | **A** | **S** | **D** | **E** | **X** | **A** | **L** | **E** | **X** | **C** | **A** | **L** | **I** | **A** | **E** | **A** | **X** | **A** | **S** | **X** | **E** | **X** | **C** | **A** | **E** | **A** | **S** |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | **E** | **X** | **C** | **A** | **L** | **I** | **B** | **U** | **R** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Salah pada index ke 2 sehingga digeser sebanyak

i – kmpNext[i]=2 – 0 = 2 kotak

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| **E** | **S** | **A** | **E** | **X** | **C** | **A** | **L** | **I** | **B** | **U** | **R** | **A** | **E** | **X** | **A** | **L** | **A** | **E** | **E** | **X** | **A** | **S** | **A** | **S** | **D** | **E** | **X** | **A** | **L** | **E** | **X** | **C** | **A** | **L** | **I** | **A** | **E** | **A** | **X** | **A** | **S** | **X** | **E** | **X** | **C** | **A** | **E** | **A** | **S** |
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Salah pada index ke 0 sehingga digeser sebanyak

i – kmpNext[i]=0 – (-1) = 1 kotak

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| **E** | **S** | **A** | **E** | **X** | **C** | **A** | **L** | **I** | **B** | **U** | **R** | **A** | **E** | **X** | **A** | **L** | **A** | **E** | **E** | **X** | **A** | **S** | **A** | **S** | **D** | **E** | **X** | **A** | **L** | **E** | **X** | **C** | **A** | **L** | **I** | **A** | **E** | **A** | **X** | **A** | **S** | **X** | **E** | **X** | **C** | **A** | **E** | **A** | **S** |
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Salah pada index ke 0 sehingga digeser sebanyak

i – kmpNext[i]=0 – (-1) = 1 kotak

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Salah pada index ke 0 sehingga digeser sebanyak

i – kmpNext[i]=0 – (-1) = 1 kotak

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| **E** | **S** | **A** | **E** | **X** | **C** | **A** | **L** | **I** | **B** | **U** | **R** | **A** | **E** | **X** | **A** | **L** | **A** | **E** | **E** | **X** | **A** | **S** | **A** | **S** | **D** | **E** | **X** | **A** | **L** | **E** | **X** | **C** | **A** | **L** | **I** | **A** | **E** | **A** | **X** | **A** | **S** | **X** | **E** | **X** | **C** | **A** | **E** | **A** | **S** |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | **E** | **X** | **C** | **A** | **L** | **I** | **B** | **U** | **R** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Salah pada index ke 2 sehingga digeser sebanyak

i – kmpNext[i]=2 - 0 = 2 kotak

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| **E** | **S** | **A** | **E** | **X** | **C** | **A** | **L** | **I** | **B** | **U** | **R** | **A** | **E** | **X** | **A** | **L** | **A** | **E** | **E** | **X** | **A** | **S** | **A** | **S** | **D** | **E** | **X** | **A** | **L** | **E** | **X** | **C** | **A** | **L** | **I** | **A** | **E** | **A** | **X** | **A** | **S** | **X** | **E** | **X** | **C** | **A** | **E** | **A** | **S** |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | **E** | **X** | **C** | **A** | **L** | **I** | **B** | **U** | **R** |  |  |  |  |  |  |  |  |  |  |  |  |  |

Salah pada index ke 0 sehingga digeser sebanyak

i – kmpNext[i]=0 – (-1) = 1 kotak

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| **E** | **S** | **A** | **E** | **X** | **C** | **A** | **L** | **I** | **B** | **U** | **R** | **A** | **E** | **X** | **A** | **L** | **A** | **E** | **E** | **X** | **A** | **S** | **A** | **S** | **D** | **E** | **X** | **A** | **L** | **E** | **X** | **C** | **A** | **L** | **I** | **A** | **E** | **A** | **X** | **A** | **S** | **X** | **E** | **X** | **C** | **A** | **E** | **A** | **S** |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | **E** | **X** | **C** | **A** | **L** | **I** | **B** | **U** | **R** |  |  |  |  |  |  |  |  |  |  |  |  |

Salah pada index ke 0 sehingga digeser sebanyak

i – kmpNext[i]=0 – (-1) = 1 kotak

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| **E** | **S** | **A** | **E** | **X** | **C** | **A** | **L** | **I** | **B** | **U** | **R** | **A** | **E** | **X** | **A** | **L** | **A** | **E** | **E** | **X** | **A** | **S** | **A** | **S** | **D** | **E** | **X** | **A** | **L** | **E** | **X** | **C** | **A** | **L** | **I** | **A** | **E** | **A** | **X** | **A** | **S** | **X** | **E** | **X** | **C** | **A** | **E** | **A** | **S** |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | **E** | **X** | **C** | **A** | **L** | **I** | **B** | **U** | **R** |  |  |  |  |  |  |  |  |  |  |  |

Salah pada index ke 6 sehingga digeser sebanyak

i – kmpNext[i]=6 - 0 = 6 kotak

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| **E** | **S** | **A** | **E** | **X** | **C** | **A** | **L** | **I** | **B** | **U** | **R** | **A** | **E** | **X** | **A** | **L** | **A** | **E** | **E** | **X** | **A** | **S** | **A** | **S** | **D** | **E** | **X** | **A** | **L** | **E** | **X** | **C** | **A** | **L** | **I** | **A** | **E** | **A** | **X** | **A** | **S** | **X** | **E** | **X** | **C** | **A** | **E** | **A** | **S** |
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Salah pada index ke 0 sehingga digeser sebanyak

i – kmpNext[i]=0 – (-1) = 1 kotak

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| **E** | **S** | **A** | **E** | **X** | **C** | **A** | **L** | **I** | **B** | **U** | **R** | **A** | **E** | **X** | **A** | **L** | **A** | **E** | **E** | **X** | **A** | **S** | **A** | **S** | **D** | **E** | **X** | **A** | **L** | **E** | **X** | **C** | **A** | **L** | **I** | **A** | **E** | **A** | **X** | **A** | **S** | **X** | **E** | **X** | **C** | **A** | **E** | **A** | **S** |
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Salah pada index ke 1 sehingga digeser sebanyak

i – kmpNext[i]=1 - 0 = 1 kotak

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| **E** | **S** | **A** | **E** | **X** | **C** | **A** | **L** | **I** | **B** | **U** | **R** | **A** | **E** | **X** | **A** | **L** | **A** | **E** | **E** | **X** | **A** | **S** | **A** | **S** | **D** | **E** | **X** | **A** | **L** | **E** | **X** | **C** | **A** | **L** | **I** | **A** | **E** | **A** | **X** | **A** | **S** | **X** | **E** | **X** | **C** | **A** | **E** | **A** | **S** |
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Salah pada index ke 0 sehingga digeser sebanyak

i – kmpNext[i]=0 – (-1) = 1 kotak

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| **E** | **S** | **A** | **E** | **X** | **C** | **A** | **L** | **I** | **B** | **U** | **R** | **A** | **E** | **X** | **A** | **L** | **A** | **E** | **E** | **X** | **A** | **S** | **A** | **S** | **D** | **E** | **X** | **A** | **L** | **E** | **X** | **C** | **A** | **L** | **I** | **A** | **E** | **A** | **X** | **A** | **S** | **X** | **E** | **X** | **C** | **A** | **E** | **A** | **S** |
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i – kmpNext[i]=0 – (-1) = 1 kotak

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| **E** | **S** | **A** | **E** | **X** | **C** | **A** | **L** | **I** | **B** | **U** | **R** | **A** | **E** | **X** | **A** | **L** | **A** | **E** | **E** | **X** | **A** | **S** | **A** | **S** | **D** | **E** | **X** | **A** | **L** | **E** | **X** | **C** | **A** | **L** | **I** | **A** | **E** | **A** | **X** | **A** | **S** | **X** | **E** | **X** | **C** | **A** | **E** | **A** | **S** |
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Salah pada index ke 0 sehingga digeser sebanyak

i – kmpNext[i]=0 – (-1) = 1 kotak

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| **E** | **S** | **A** | **E** | **X** | **C** | **A** | **L** | **I** | **B** | **U** | **R** | **A** | **E** | **X** | **A** | **L** | **A** | **E** | **E** | **X** | **A** | **S** | **A** | **S** | **D** | **E** | **X** | **A** | **L** | **E** | **X** | **C** | **A** | **L** | **I** | **A** | **E** | **A** | **X** | **A** | **S** | **X** | **E** | **X** | **C** | **A** | **E** | **A** | **S** |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | **E** | **X** | **C** | **A** | **L** | **I** | **B** | **U** | **R** |

Salah pada index ke 0 sehingga digeser sebanyak

i – kmpNext[i]=0 – (-1) = 1 kotak

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **E** | **S** | **A** | **E** | **X** | **C** | **A** | **L** | **I** | **B** | **U** | **R** | **A** | **E** | **X** | **A** | **L** | **A** | **E** | **E** | **X** | **A** | **S** | **A** | **S** | **D** | **E** | **X** | **A** | **L** | **E** | **X** | **C** | **A** | **L** | **I** | **A** | **E** | **A** | **X** | **A** | **S** | **X** | **E** | **X** | **C** | **A** | **E** | **A** | **S** |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | **E** | **X** | **C** | **A** | **L** | **I** | **B** | **U** | **R** |

Sudah melebihi banyak kata sehingga pencarian berhenti

Sehingga dapatlah pattern EXCALIBUR pada kumpulan karakter di atas sebanyak 1 kali pada index ke 3