Nama : Husein Ibnu Mahmud

NIM : 211401054

Kata yang dicari :

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Pattern | A | A | B | A | C |  |
| KMPNext | -1 | -1 | 1 | -1 | 1 | 0 |
| Indeks | 0 | 1 | 2 | 3 | 4 | 5 |

Teks :

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A | A | B | A | A | C | A | A | B | S | A | S | A | A | A | A | B | A | A | B | A | C | A | B | A | A | B | A | X | A | A | B | A | C | A | B | A | A | B | C | A | B | A | A | B | A | F | A | A | A |
| A | A | B | A | C |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Salah pada indeks ke- 4 maka geser sebanyak i – KMPNext[i] = 4 – 1 = 3 kotak

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A | A | B | A | A | C | A | A | B | S | A | S | A | A | A | A | B | A | A | B | A | C | A | B | A | A | B | A | X | A | A | B | A | C | A | B | A | A | B | C | A | B | A | A | B | A | F | A | A | A |
|  |  |  | A | A | B | A | C |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Salah pada indeks ke- 2 maka geser sebanyak i – KMPNext[i] = 2 – 1 = 1 kotak

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A | A | B | A | A | C | A | A | B | S | A | S | A | A | A | A | B | A | A | B | A | C | A | B | A | A | B | A | X | A | A | B | A | C | A | B | A | A | B | C | A | B | A | A | B | A | F | A | A | A |
|  |  |  |  | A | A | B | A | C |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Salah pada indeks ke- 1 maka geser sebanyak i – KMPNext[i] = 1 – (-1) = 2 kotak

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A | A | B | A | A | C | A | A | B | S | A | S | A | A | A | A | B | A | A | B | A | C | A | B | A | A | B | A | X | A | A | B | A | C | A | B | A | A | B | C | A | B | A | A | B | A | F | A | A | A |
|  |  |  |  |  |  | A | A | B | A | C |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Salah pada indeks ke- 3 maka geser sebanyak i – KMPNext[i] = 3 – (-1) = 4 kotak

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A | A | B | A | A | C | A | A | B | S | A | S | A | A | A | A | B | A | A | B | A | C | A | B | A | A | B | A | X | A | A | B | A | C | A | B | A | A | B | C | A | B | A | A | B | A | F | A | A | A |
|  |  |  |  |  |  |  |  |  |  | A | A | B | A | C |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Salah pada indeks ke- 1 maka geser sebanyak i – KMPNext[i] = 1 – (-1) = 2 kotak

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A | A | B | A | A | C | A | A | B | S | A | S | A | A | A | A | B | A | A | B | A | C | A | B | A | A | B | A | X | A | A | B | A | C | A | B | A | A | B | C | A | B | A | A | B | A | F | A | A | A |
|  |  |  |  |  |  |  |  |  |  |  |  | A | A | B | A | C |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Salah pada indeks ke- 2 maka geser sebanyak i – KMPNext[i] = 2 – 1 = 3 kotak

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A | A | B | A | A | C | A | A | B | S | A | S | A | A | A | A | B | A | A | B | A | C | A | B | A | A | B | A | X | A | A | B | A | C | A | B | A | A | B | C | A | B | A | A | B | A | F | A | A | A |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | A | A | B | A | C |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Salah pada indeks ke- 1 maka geser sebanyak i – KMPNext[i] = 1 – (-1) = 2 kotak

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A | A | B | A | A | C | A | A | B | S | A | S | A | A | A | A | B | A | A | B | A | C | A | B | A | A | B | A | X | A | A | B | A | C | A | B | A | A | B | C | A | B | A | A | B | A | F | A | A | A |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | A | A | B | A | C |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

**PATTERN ditemukan pada indeks ke- 17 maka dilakukan pergeseran sebanyak panjang pattern – KMPNext[i] = 5 – 0 = 5 kotak**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A | A | B | A | A | C | A | A | B | S | A | S | A | A | A | A | B | A | A | B | A | C | A | B | A | A | B | A | X | A | A | B | A | C | A | B | A | A | B | C | A | B | A | A | B | A | F | A | A | A |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | A | A | B | A | C |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Salah pada indeks ke- 1 maka geser sebanyak i – KMPNext[i] = 1 – (-1) = 2 kotak

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A | A | B | A | A | C | A | A | B | S | A | S | A | A | A | A | B | A | A | B | A | C | A | B | A | A | B | A | X | A | A | B | A | C | A | B | A | A | B | C | A | B | A | A | B | A | F | A | A | A |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | A | A | B | A | C |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Salah pada indeks ke- 4 maka geser sebanyak i – KMPNext[i] = 4 – 1 = 3 kotak

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A | A | B | A | A | C | A | A | B | S | A | S | A | A | A | A | B | A | A | B | A | C | A | B | A | A | B | A | X | A | A | B | A | C | A | B | A | A | B | C | A | B | A | A | B | A | F | A | A | A |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | A | A | B | A | C |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Salah pada indeks ke- 1 maka geser sebanyak i – KMPNext[i] = 1 – (-1) = 2 kotak

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A | A | B | A | A | C | A | A | B | S | A | S | A | A | A | A | B | A | A | B | A | C | A | B | A | A | B | A | X | A | A | B | A | C | A | B | A | A | B | C | A | B | A | A | B | A | F | A | A | A |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | A | A | B | A | C |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

**PATTERN ditemukan pada indeks ke- 29 maka dilakukan pergeseran sebanyak panjang pattern – KMPNext[i] = 5 – 0 = 5 kotak**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A | A | B | A | A | C | A | A | B | S | A | S | A | A | A | A | B | A | A | B | A | C | A | B | A | A | B | A | X | A | A | B | A | C | A | B | A | A | B | C | A | B | A | A | B | A | F | A | A | A |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | A | A | B | A | C |  |  |  |  |  |  |  |  |  |  |  |

Salah pada indeks ke- 1 maka geser sebanyak i – KMPNext[i] = 1 – (-1) = 2 kotak

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A | A | B | A | A | C | A | A | B | S | A | S | A | A | A | A | B | A | A | B | A | C | A | B | A | A | B | A | X | A | A | B | A | C | A | B | A | A | B | C | A | B | A | A | B | A | F | A | A | A |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | A | A | B | A | C |  |  |  |  |  |  |  |  |  |

Salah pada indeks ke- 3 maka geser sebanyak i – KMPNext[i] = 3 – (-1) = 4 kotak

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A | A | B | A | A | C | A | A | B | S | A | S | A | A | A | A | B | A | A | B | A | C | A | B | A | A | B | A | X | A | A | B | A | C | A | B | A | A | B | C | A | B | A | A | B | A | F | A | A | A |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | A | A | B | A | C |  |  |  |  |  |

Salah pada indeks ke- 1 maka geser sebanyak i – KMPNext[i] = 1 – (-1) = 2 kotak

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A | A | B | A | A | C | A | A | B | S | A | S | A | A | A | A | B | A | A | B | A | C | A | B | A | A | B | A | X | A | A | B | A | C | A | B | A | A | B | C | A | B | A | A | B | A | F | A | A | A |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | A | A | B | A | C |  |  |  |

Salah pada indeks ke- 1 maka geser sebanyak i – KMPNext[i] = 4 – 1 = 3 kotak

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A | A | B | A | A | C | A | A | B | S | A | S | A | A | A | A | B | A | A | B | A | C | A | B | A | A | B | A | X | A | A | B | A | C | A | B | A | A | B | C | A | B | A | A | B | A | F | A | A | A |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | A | A | B | A | C |

Salah pada indeks ke- 1 maka geser sebanyak i – KMPNext[i] = 1 – (-1) = 2 kotak

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A | A | B | A | A | C | A | A | B | S | A | S | A | A | A | A | B | A | A | B | A | C | A | B | A | A | B | A | X | A | A | B | A | C | A | B | A | A | B | C | A | B | A | A | B | A | F | A | A | A |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | A | A | B | A | C |

Perulangan berhenti karena Panjang teks sudah melebihi panjang pattern.

**Pattern ditemukan pada indeks ke- 17 dan indeks ke- 29.**