***INFIX TO POSTFIX CONVERSION***

**A)EXPRESSION WITH BRACES:**

**Q:*****(a+b-(c\*d)/e)***

Conversion:

|  |  |  |
| --- | --- | --- |
| character | stack | output |
| Null | empty | Null |
| ( | ( | Null |
| A | ( | A |
| + | (,+ | A |
| B | (,+ | AB |
| - | (,+,- | AB |
| ( | (,+,-,( | AB |
| C | (,+,-,( | ABC |
| \* | (,+,-,(,\* | ABC |
| D | (,+,-,(,\* | ABCD |
| ) | (,+,- | ABCD\* |
| / | (,+,-,/ | ABCD\* |
| E | (,+,-,/ | ABCD\*E |
| ) | empty | ABCD\*E/-+ |
| NULL | EMPTY | ABCD\*E/-+ |
|  |  |  |
|  |  |  |

**Obtained postfix expression is:abcd\*e/-+**

**B)EXPRESSION WITHOUT BRACES:**

**Q)****a+b-c\*d/e**

**Conversion:**

|  |  |  |
| --- | --- | --- |
| **Character** | **Stack** | **Output** |
| **null** | **empty** | **null** |
| **A** | **empty** | **A** |
| **+** | **+** | **A** |
| **B** | **+** | **AB** |
| **-** | **-** | **AB+** |
| **C** | **-** | **AB+C** |
| **\*** | **-,\*** | **AB+C** |
| **D** | **-,\*** | **AB+CD** |
| **/** | **-,/** | **AB+CD\*** |
| **E** | **-,/** | **AB+CD\*E** |
| **null** | **empty** | **AB+CD\*E/-** |
|  |  |  |

**Obtained postfix expression:ab+cd\*e/-**