## Question.

Fill the table below accordingly to convert the expression A * B ^ C + D given in infix notation to an expression in postfix notation using an operator stack. Note that you are supposed leave some of the cells under Operator Stack blank.

| Token | Operator Stack |  |  | Top | Output |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | [0] | [1] | [2] |  |  |
| A |  |  |  | -1 | A |
| * | * |  |  | 0 | A |
| B | * |  |  | 0 | A B |
| $\wedge$ | * | ^ |  | 1 | A B |
| C | * | $\wedge$ |  | 1 | A B C |
| + | + |  |  | 0 | ABC ${ }^{\wedge}$ * |
| D | + |  |  | 0 | ABC ${ }^{\wedge}$ * D |
| eos |  |  |  | -1 | ABC ${ }^{*} \mathrm{D}+$ |

