

Q3] given expression:

$$(A + B * (C - D)^E) / (F - G + H * I)$$

character	stack	Expression
((
A	(A
+	(+	A
B	(+	AB
*	(+ *	AB
((+ * (AB
C	(+ * (ABC
-	(+ * (-	ABC
D	(+ * (-	ABCD
)	(+ *	ABCD -
^	(+ * ^	ABCD -
E	(+ * ^	ABCD - E
)		ABCD - E the ^ * +

Question
Nos.

/	/	ABCD - E ^ * +
(/C	ABCD - E ^ * +
F	/C	ABCD - E ^ * + F
-	/C -	ABCD - E ^ * + F
G	/C -	ABCD - E ^ * + F G
+	/C +	ABCD - E ^ * + F G -
H	/C +	ABCD - E ^ * + F G - H
*	/C + *	ABCD - E ^ * + F G - H
I	/C + *	ABCD - E ^ * + F G - H I
)	/	ABCD - E ^ * + F G - H I * +
		ABCD - E ^ * + F G - H I * + /

∴ The final postfix expression is :

ABCD - E ^ * + F G - H I * + /

Q2] assuming that a circular linked list has ~~also~~ already been created with a head pointer pointing to the first node.

1. Insertion at the start

Algo Insert - beg

IF (AVAIL == NULL)

Write "SPACE UNAVAILABLE"

ELSE

NEWNODE = AVAIL

NEWNODE → DATA = NEWDATA

NEWNODE → NEXT = HEAD;