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Conversion of Infix to postfix :-

Pseudocode :

```
CONVERT   INFIX_POSTFIX (EXP)
{

CREATE  A  STACK  S
for  i=0  to  length (exp) -1
{

if  exp [i] is  Operand
res = res + exp [i]
else
if  exp [i] is  Operator
WHILE (Is Empty () && HASHIGHERP (S.TOP(),EXP [i])
{

RES = RES + S.TOP()
S.POP
}

S. push (exp[i])
ELSE IF  ISOPENINGPAR (EXP[i])
S. PUSH (EXP [i])
ELSE  IF  ISOPENINGPAR (EXP [i])
WHILE (Is Empty () && ISOPENINGPAR (S.TOP())
{

RES = RES + S. TOP()
S. POP()
}
}
```

```
while (Is Empty())
{

    res = rest + S. top ()
    S. pop ()
    }

    return res;
    }
```

ALGORITHM:-

STEP -1: Add ")" to the end of the Infix exp.
STEP-2: Push "C" on to the stack.
STEP - 3: Repeat until each character in the infix notation is scanned.
IF a "C" is encountered, push it on the stack
IF an Operand (whether a digit or a character) is encountered, add it to the postfix exp.
IF a ")" is encountered, then
a) Repeatedly pop from stack and add it to the postfix exp until a "c" is encountered.
b) Discard the "C". That is, remove the "C" from stack and do not add it to the post fix exp.
IF an Operator O is encountered, then
a) Repeatedly pop from stack & add each operator (popped from the stack) to the postfix exp which has the same precedence or a higher precedence than O.
b) Push the operator O to the stack.
[END OF IF].

STEP-4: Repeatedly pop from the stack & add it to the postfix exp until a stack is empty

STEP-5: EXIT.