LAB-3

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WAP to convert infix to postfix using Stack concepts. Convert a given valid parenthesized infix arithmetic expression to postfix exp. The expression consists of single character operands and the binary operators + (plus), - (minus), * (multiply) and / (divide).

```
# define size 50
char exp[size];

CONVERT_INFIX_TO_POSTFIX (exp)
{
        CREATE STACK S;
        for (i=0 to length(exp)-1)
        {
            if (exp[i] is operand)
                res = res + exp[i];
            else if (exp[i] == operator)
            {
                while (!S.EMPTY () && HASHIGHERPRIOR (S.TOP(),
                                                   exp[i]))
                {
                        res = res + S.top();
                        S. POP ();
                }
                S.push (exp[i])
            }
            elseif ( ISOPENING PAR(exp[i]))
            {
                    S.Push (exp[i]);
            }
            elseif ( ISCLOSINGPAR(exp[i]))
            {
                while (!S.EMPTY() && !ISOPENINGPAR (S.TOP()))
                {
                        res = res + s.top();
                        S.POP();
                }
                s.pop();
        }   // else if
    }
        while ( !s.EMPTY())
        {
                res = res + s.top ()
                s. pop ();
        }
          return res;
}
```