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Lab program - 2
Hindude (Stdio h)
# include & string. h)
int main ()
   chan stack[20], iexp[50], pexp[50];
    inti, p=0, 8=-1, f, Z=1, operands =0, operators =0
    obracket = 0, also chracket= 0
   paintl ("Enter the expression \n").
   scant (" % & " (exp);
    for W= 0; i & Stalencierp); i++)
     if (iexpci]=='+'|liexpci]=="-/|liexpci]=='* |liexpci]
      == /' [[iexpri]== '+' [[iexpri]== ' 1')
     operators ++;
     If ((cexptil > 6 S & i exptil <=90) | (iexptil >=97 & s iexptile
      122))
     if [iexpli] == '(')
       obracket ++;
      [ (iexpli] == ()()
     Conacket 1+;
     1 Coperandy = Coperators +1) 11 Obracked! = chracked)
    for (i=0; ic stalentiexp); it)
       if (Ciexpriz >65 && iexpriz (=90) || Ciexpriz >= 97 &&
    S pexpcp]= iexpsi];
```

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else of ( iexpti]== '(')
         Stack[17:icxp[i]
Use if liexpaid == ')'
    1) CiexpCi-1]== '+' || iexpCi-1]== '-' || iexpCi-1]== '+' |
|| iexpCi-1]== '+' || iexpCi-1]== '+' )
   7=0'
        (StackEs] == "('
    PexpCPJ= stack[s]
  while ('c'z='c').
       (Stack[1] 2= ( 18==-1)
        stack[8] = jerpci]
                 stack(ST= iexpti]
```

Scanned with CamScanner

```
PexpCpJ= StackCsJ;
     while (81=-1)
       stack Es] = iexpaij;
  3
3
 the if (iexpri) == (* 11 iexpri) (i)
         (Stack [8]== (C'] | Stack[8] == '+' | | Stack[8] == '-'
           Stack ESJ= iexpail
             0 ( ( stack[ 8] == '+' | | stack[ 8] == '-' | | stack[ s] == '(')
                  Stack[8] = [exp[i]
```

Scanned with CamScanner

```
Stack [s] = iexpci]
  2 i] ( \dack \Cs] == '(' || \dack \Cs] == '+' |)

Stack \(s) == '-' || \s = = -| || \dack \(s) == '*'
    11 stack[s] == '/')
      Stack CSJ = iexpaij
   else
       do S
              1=0.
          if ( Stack Cs] == '+' | | Atack Cs) == - ' |
       Stack (8) == (' | 1 stack (8) == (+' | 1 stack (8) == -/1)
         Stack [S] = iexpa]
         bruck;
pexpCPJ=stack[s]
  while (81=-1)
      stack[8] = [expri];
    do C
            Pexpaj: 8tackaj.
              D++', 8--,
```

Scanned with CamScanner

```
while (s!=-1);

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if (2==0)

paintf (" Invalid expression (n");

else

E paintf (" The postfix expression is: \n");

for (i=0; i<p; i+1)

E printf ("% C", pexp(i));

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3 return 0;

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```