

# EXPERIMENT 8

## AIM

Develop an operator precedence parser for a given language

## ALGORITHM

1. Start
2. Read a string from a user.
3. Add \$ at both the ends.
4. Scan the input string from left until '>' is encountered.
5. Scan towards left over all equal precedence until first leftmost '<' is encountered.
6. Everything between '<' and '>' is handled.
7. While reaching '\$' , parsing is successful and stops.
8. Display the operator precedence table
9. Stop

## OUTPUT

```
Activities Terminal
anagha@user-hp-laptop-15-da1xxx: ~
11anaghasethu-p8.c:43:10: warning: implicit declaration of function 'strlen' [-Wimplicit-function-declaration]
while(i<strlen(ip))
^~~~~~
11anaghasethu-p8.c:43:10: warning: incompatible implicit declaration of built-in function 'strlen'
11anaghasethu-p8.c:43:10: note: include <string.h> or provide a declaration of 'strlen'
anagha@user-hp-laptop-15-da1xxx:~$ clear
anagha@user-hp-laptop-15-da1xxx:~$ ./a.out
Enter the no.of terminals :
4
Enter the terminals :
+*!$
Enter the table values :
Enter the value for + +:>
Enter the value for + *:<
Enter the value for + !:<
Enter the value for + $:>
Enter the value for * +:>
Enter the value for * *:>
Enter the value for * !:<
Enter the value for * $:>
Enter the value for ! +:>
Enter the value for ! *:>
Enter the value for ! !:=
Enter the value for ! $:>
Enter the value for $ +:<
Enter the value for $ *:<
Enter the value for $ !:<
Enter the value for $ $:A
**** OPERATOR PRECEDENCE TABLE ****
+ * ! $
+ > < < >
* > < >
! > > = >
$ < < < A
Enter the input string: !+!*$
STACK      INPUT STRING      ACTION
$           !+!*$      Shift !
$!          +!*$      Reduce
$           +!*$      Shift +
$+          !*$      Shift !
$+!         !*$      Reduce
$+!         !*$      Shift *
$+!*        !$      Shift !
$+!*!       $      Reduce
$+!*!       $      Reduce
$+!*        $      Reduce
$+          $      Reduce
String is accepted
anagha@user-hp-laptop-15-da1xxx:~$
```