

EXPERIMENT 11

AIM

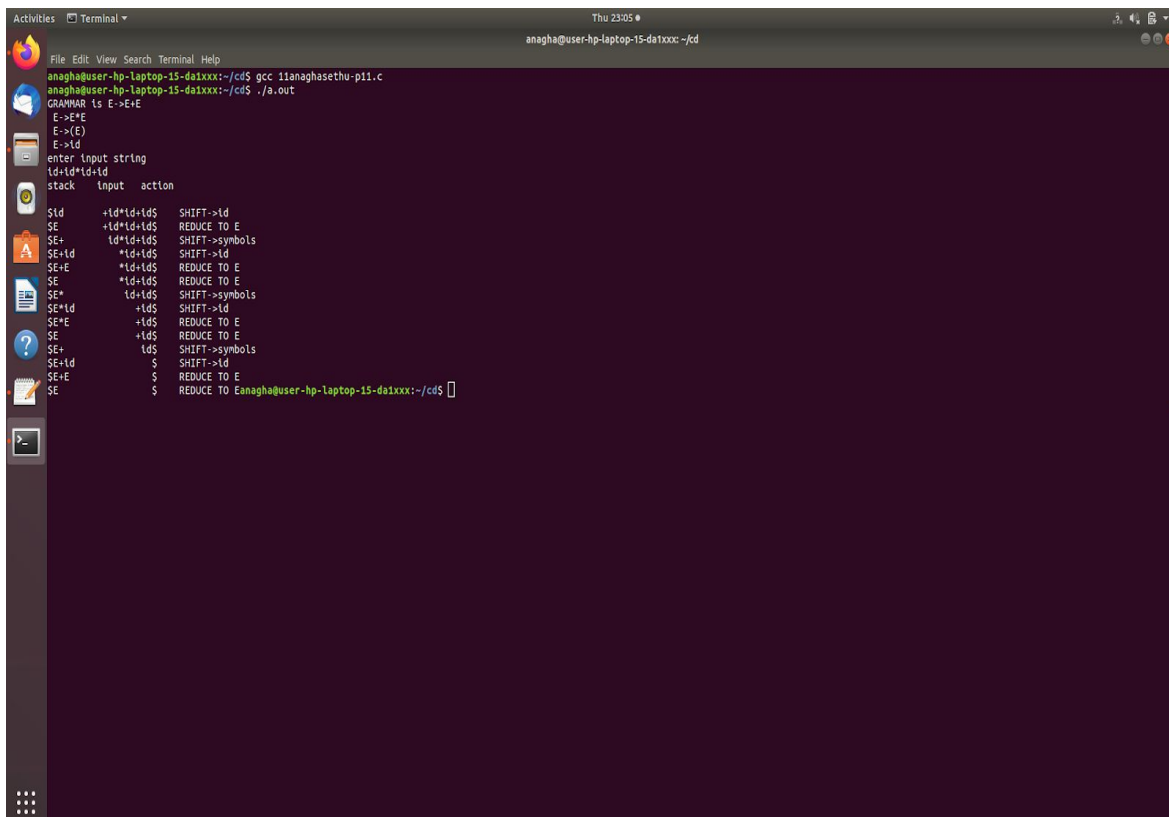
To implement shift reduce parser using C program.

ALGORITHM

1. Start
2. Get the input expression and store it in the input buffer.
3. Read the data from the input buffer one at the time
4. Using stack and push & pop operation shift and reduce symbols with respect to production rules available.
5. Continue the process till symbol shift and production rule reduce reaches the start symbol.
6. Display the Stack Implementation table with corresponding Stack actions with input symbols.
7. Stop

OUTPUT

```
gcc 11anaghasethu-p11.c
./a.out
```



```
anagha@user-hp-laptop-15-da1xxx:~/cd$ gcc 11anaghasethu-p11.c
anagha@user-hp-laptop-15-da1xxx:~/cd$ ./a.out
GRAMMAR 1s E->E*E
E->E*E
E->(E)
E->td
enter input string
td*td*td
stack  input  action
S1d      +td*td+td$  SHIFT->td
SE       +td*td+td$  REDUCE TO E
SE+      td*td+td$  SHIFT->symbols
SE+td    +td+td$    SHIFT->td
SE+E     +td+td$    REDUCE TO E
SE       +td+td$    REDUCE TO E
SE+      td+td$    SHIFT->symbols
SE+td    +td$      SHIFT->td
SE+E     +td$      REDUCE TO E
SE       +td$      REDUCE TO E
SE+      td$      SHIFT->symbols
SE+td    $        SHIFT->td
SE+E     $        REDUCE TO E
SE       $        REDUCE TO Eanagha@user-hp-laptop-15-da1xxx:~/cd$
```