Tarush J. Reddy

Program Number :- 02

Question

Develop, Implement & execute a program using yacc tool to recognize all strings ending with b preceded by n a's using the grammar $a^n b$ (note :- input n value)

Answer

2.1

```
%{
# include <<stdio>> "y. tab.h"
%}
%%
a        {return A;}
b        {return B}
[\n]     return '\n';
%%
```

2.y

```
%{
# include < stdio.h>
# include < stdlib.h>
%}
%token  A B
%%
input :   s '\n' { printf (" Successful Grammar\n)
```

```
exit (0); }
S: A S) B ;B
S): ; ; A S)
% %
main ()
{
printf (" \n enter a string \n");
yyparse ();
}
int yyerror ()
{
printf (" \n error in parsing on invalid string \n");
exit (0);
}
```

Output
```
$ lex 2.1
$ yacc -d 2.y
$ gcc lex.yy.c   y.tab.c   -ll
$ . /a.out
enter a string
abaab
error in parsing on invalid string
```

```
student@student-virtual-machine:~$ lex 2.l
student@student-virtual-machine:~$ yacc -d 2.y
student@student-virtual-machine:~$ gcc lex.yy.c y.tab.c -ll
student@student-virtual-machine:~$ ./a.out

 Enter a String
aaaab
Successful Grammar
student@student-virtual-machine:~$ ./a.out

 Enter a String
abaab

Error in parsing or invalid string
```