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YACC program which accept strings that starts and ends with 0 or 1

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Problem: Write a YACC program which accept strings that starts and ends with Zero or One

Explanation:

[YACC \(Yet another Compiler-Compiler\)](#) is the standard parser generator for the Unix operating system. An open source program, yacc generates code for the parser in the C programming language. The acronym is usually rendered in lowercase but is occasionally seen as YACC or Yacc.

Examples:

Input: 001100

Output: Sequence Accepted

Input: 1001001

Output: Sequence Accepted

Input: 0011101

Output: Sequence Rejected

Input: 100110

Output: Sequence Rejected

Lexical Analyzer Source Code :

```
%{  
    /* Definition section */  
    extern int yylval;  
}%  
  
/* Rule Section */  
%%
```

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Got It !

```
1 {yyval = 1; return ONE;}

.|\\n {yyval = 2; return 0;}

%%
```

Parser Source Code :

```
%{
/* Definition section */
#include<stdio.h>
#include <stdlib.h>
void yyerror(const char *str)
{
    printf("\\nSequence Rejected\\n");
}
%}

%token ZERO ONE

/* Rule Section */
%%

r : s {printf("\\nSequence Accepted\\n\\n");}
;

s : n
  | ZERO a
  | ONE b
;

a : n a
  | ZERO
;

b : n b
  | ONE
;

n : ZERO
  | ONE
;

%%

#include"lex.yy.c"
//driver code
```

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```

yyvsparse();
printf("\n");
return 0;
}

```

Output:

```

thakur@thakur-VirtualBox: ~/Documents/yacc
thakur@thakur-VirtualBox:~/Documents/yacc$ lex prog01.l
thakur@thakur-VirtualBox:~/Documents/yacc$ yacc prog01.y
prog01.y:30 parser name defined to default 'parse'
thakur@thakur-VirtualBox:~/Documents/yacc$ gcc y.tab.c -lfl -ly
/usr/share/bison+/bison.cc: In function 'yyvsparse':
/usr/share/bison+/bison.cc:180:22: warning: implicit declaration of function 'yylex' [-Wimplicit-function-declaration]
#define YY_LEX yylex
                        ^
/usr/share/bison+/bison.cc:465:25: note: in expansion of macro 'YY_parse_LEX'
#define YYLEX YY_LEX()
                        ^
/usr/share/bison+/bison.cc:730:23: note: in expansion of macro 'YYLEX'
YY_CHAR = YYLEX;
                        ^
thakur@thakur-VirtualBox:~/Documents/yacc$ ./a.out
Enter Sequence of Zeros and Ones : 001100
Sequence Accepted

thakur@thakur-VirtualBox:~/Documents/yacc$ ./a.out
Enter Sequence of Zeros and Ones : 1001001
Sequence Accepted

thakur@thakur-VirtualBox:~/Documents/yacc$ ./a.out
Enter Sequence of Zeros and Ones : 100110
Sequence Rejected

thakur@thakur-VirtualBox:~/Documents/yacc$ ./a.out
Enter Sequence of Zeros and Ones : 0011101
Sequence Rejected

thakur@thakur-VirtualBox:~/Documents/yacc$

```

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thak...



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