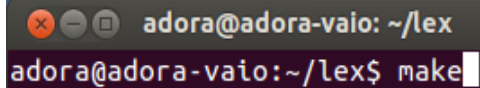


Compilers Project #1

Qiao Zhang

To run the project, simply run make in your command line environment:

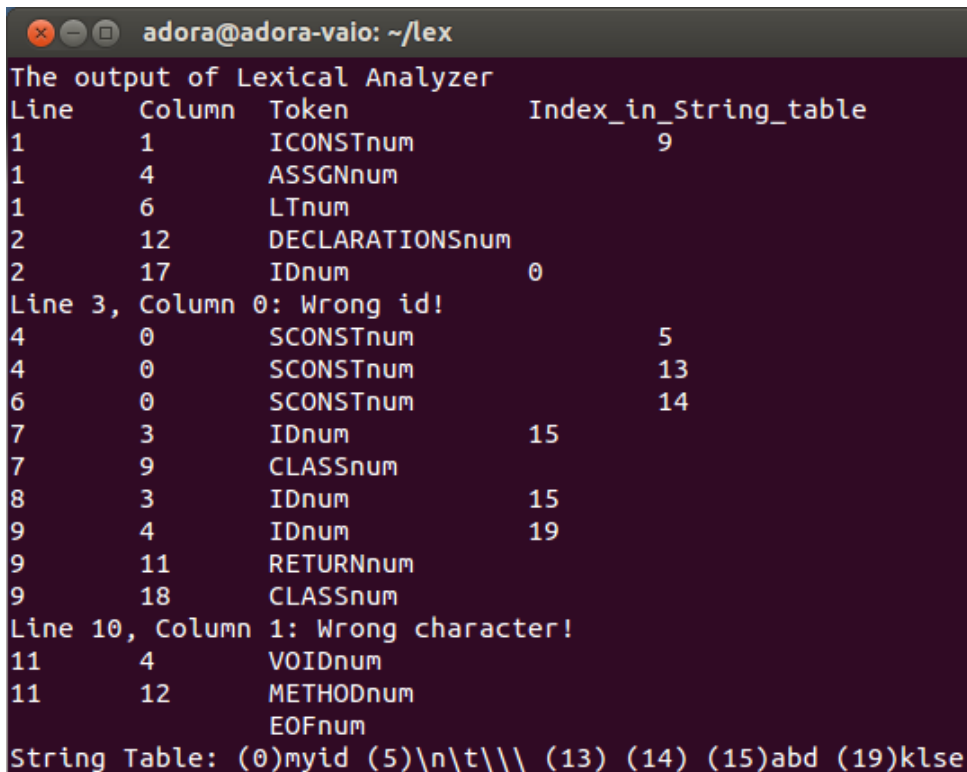
make



```
adora@adora-vaio: ~/lex
adora@adora-vaio:~/lex$ make
```

Screenshot of the output of the first program:

//Sorry I wasn't able to make the output look aligned... But the values are correct.



```
adora@adora-vaio: ~/lex
The output of Lexical Analyzer
Line   Column  Token                Index_in_String_table
1       1      ICONSTnum            9
1       4      ASSGNnum
1       6      LTnum
2      12    DECLARATIONnum
2      17    IDnum                0
Line 3, Column 0: Wrong id!
4       0      SCONSTnum            5
4       0      SCONSTnum            13
6       0      SCONSTnum            14
7       3      IDnum                15
7       9      CLASSnum
8       3      IDnum                15
9       4      IDnum                19
9      11    RETURNnum
9      18    CLASSnum
Line 10, Column 1: Wrong character!
11      4      VOIDnum
11     12    METHODnum
      EOFnum
String Table: (0)myid (5)\n\t\\ (13) (14) (15)abd (19)klse
```

The output of the first text program (test1.mjava):

The output of Lexical Analyzer

Line	Column	Token	Index_in_String_table
1	1	ICONSTnum	9
1	4	ASSGNnum	
1	6	LTnum	
2	12	DECLARATIONnum	
2	17	IDnum	0

Line 3, Column 0: Wrong id!

4	0	SCONSTnum	5
4	0	SCONSTnum	13
6	0	SCONSTnum	14
7	3	IDnum	15
7	9	CLASSnum	
8	3	IDnum	15
9	4	IDnum	19
9	11	RETURNnum	
9	18	CLASSnum	

Line 10, Column 1: Wrong character!

11	4	VOIDnum	
11	12	METHODnum	
		EOFnum	

String Table: (0)myid (5)\n\t\\ (13) (14) (15)abd (19)klse

Screenshot of the output of the second program:

```
adora@adora-vaio: ~/lex
The output of Lexical Analyzer
Line   Column  Token                Index_in_String_table
4       7      PROGRAMnum
4       10     IDnum                0
4       11     SEMInum
5        5     CLASSnum
5       10     IDnum                3
5       12     LBRACEnum
6       14     METHODnum
6       19     VOIDnum
6       24     IDnum                8
6       25     LPARENnum
6       26     RPARENnum
7       18     DECLARATIONnum
8        6     INTnum
8        8     IDnum               13
8        9     SEMInum
9       20     INTnum
9       22     IDnum               15
9       24     EQUALnum
9       26     ICONSTnum           0
9       27     SEMInum
10      28     ENDDECLARATIONnum
11       2     LBRACEnum
17      22     IDnum               17
17      23     DOTnum
17      30     IDnum               24
17      31     LPARENnum
17      31     SCONSTnum           32
17      32     RPARENnum
17      33     SEMInum
18       2     RBRACEnum
19       1     RBRACEnum
        EOFnum
String Table: (0)p2 (3)Test (8)main (13)x (15)i (17)System (24)println (32)End
of Program
adora@adora-vaio:~/lex$
```

The output of the second text program (test2.mjava):

The output of Lexical Analyzer

Line	Column	Token	Index_in_String_table
4	7	PROGRAMnum	
4	10	IDnum	0
4	11	SEMInum	
5	5	CLASSnum	
5	10	IDnum	3
5	12	LBRACEnum	
6	14	METHODnum	
6	19	VOIDnum	
6	24	IDnum	8
6	25	LPARENnum	
6	26	RPARENnum	
7	18	DECLARATIONnum	
8	6	INTnum	
8	8	IDnum	13
8	9	SEMInum	
9	20	INTnum	
9	22	IDnum	15
9	24	EQUALnum	
9	26	ICONSTnum	0
9	27	SEMInum	
10	28	ENDDECLARATIONnum	
11	2	LBRACEnum	
17	22	IDnum	17

17	23	DOTnum	
17	30	IDnum	24
17	31	LPARENnum	
17	31	SCONSTnum	32
17	32	RPARENnum	
17	33	SEMInum	
18	2	RBRACEnum	
19	1	RBRACEnum	
		EOFnum	

String Table: (0)p2 (3)Test (8)main (13)x (15)i (17)System (24)println (32)End of Program