

Program arguments: -f test.txt -l -a -v

Input file:

```
var x, y;
begin
  x := y + 56;
end.
```

Output:

Source Program:
var x, y;
begin
 x := y + 56;
end.

Lexeme Table:
Lexeme Token Type
var 29
x 2
, 17
y 2
; 18
begin 21
x 2
:= 20
y 2
+ 4
56 3
; 18
end 22
. 19

Lexeme List:
29 2 x 17 2 y 18 21 2 x 20 2 y 4 3 56 18 22 19

var_sym ident_sym x comma_sym ident_sym y semicol_sym begin_sym ident_sym x becomes_sym ident_sym
y plus_sym num_sym 56 semicol_sym end_sym period_sym

No errors, program is syntactically correct

Instructions
INC 0 0 1
INC 0 0 1
LOD 1 0 1
LIT 2 0 56
ADD 1 1 2
STO 1 0 0
SIO 0 0 3

| Instruction | PC | BP | SP | Registers | Stack |
|---------------------|----|----|----|-------------------|-------|
| 0 INC 0 0 1 | 1 | 1 | 1 | 0 0 0 0 0 0 0 0 | 0 |
| 1 INC 0 0 1 | 2 | 1 | 2 | 0 0 0 0 0 0 0 0 | 0 0 |
| 2 LOD 1 0 1 | 3 | 1 | 2 | 0 0 0 0 0 0 0 0 | 0 0 |
| 3 LIT 2 0 56 | 4 | 1 | 2 | 0 0 56 0 0 0 0 0 | 0 0 |
| 4 ADD 1 1 2 | 5 | 1 | 2 | 0 56 56 0 0 0 0 0 | 0 0 |
| 5 STO 1 0 0 | 6 | 1 | 2 | 0 56 56 0 0 0 0 0 | 56 0 |
| 6 SIO 0 0 3 | 7 | 1 | 2 | 0 56 56 0 0 0 0 0 | 56 0 |

Program Output: