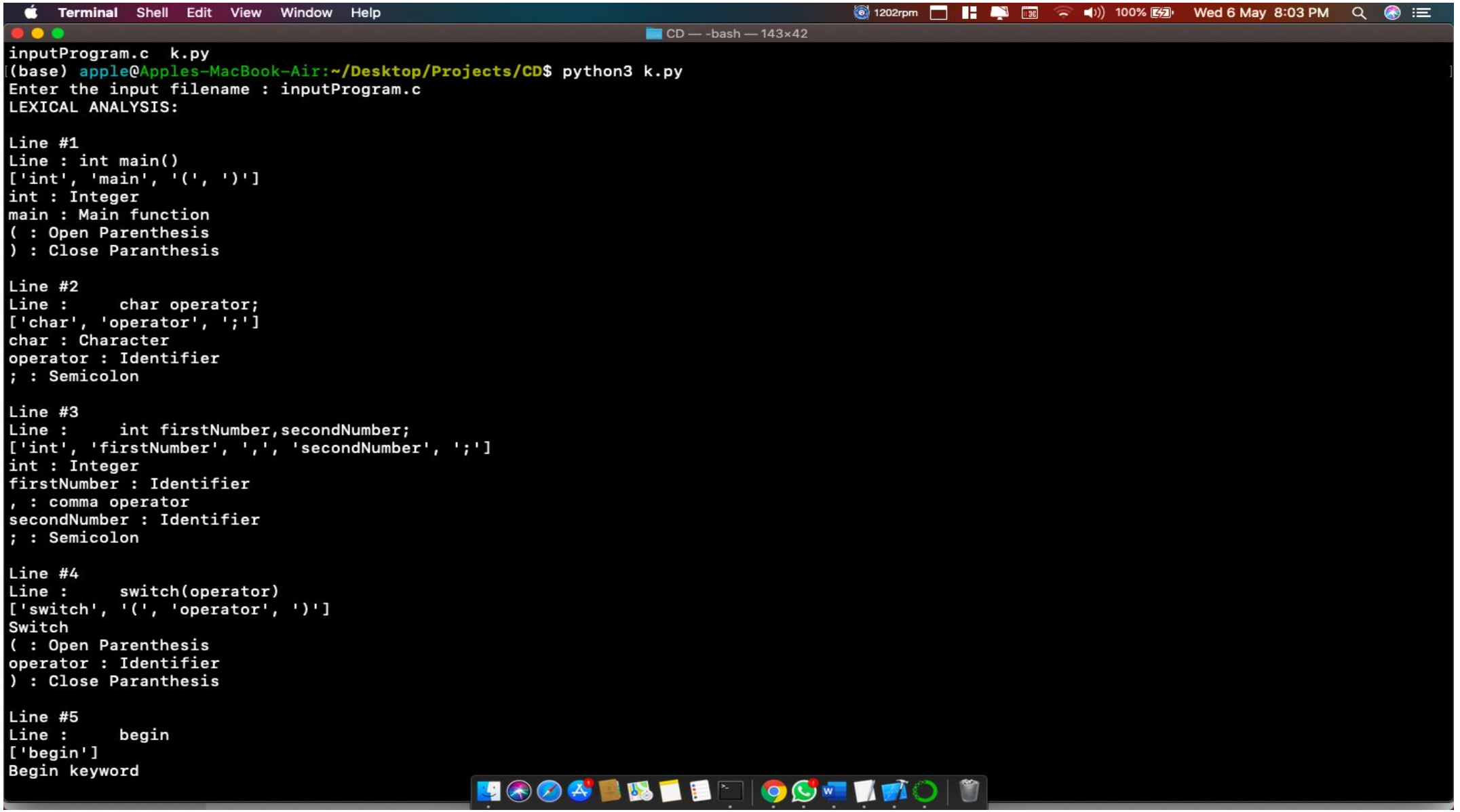
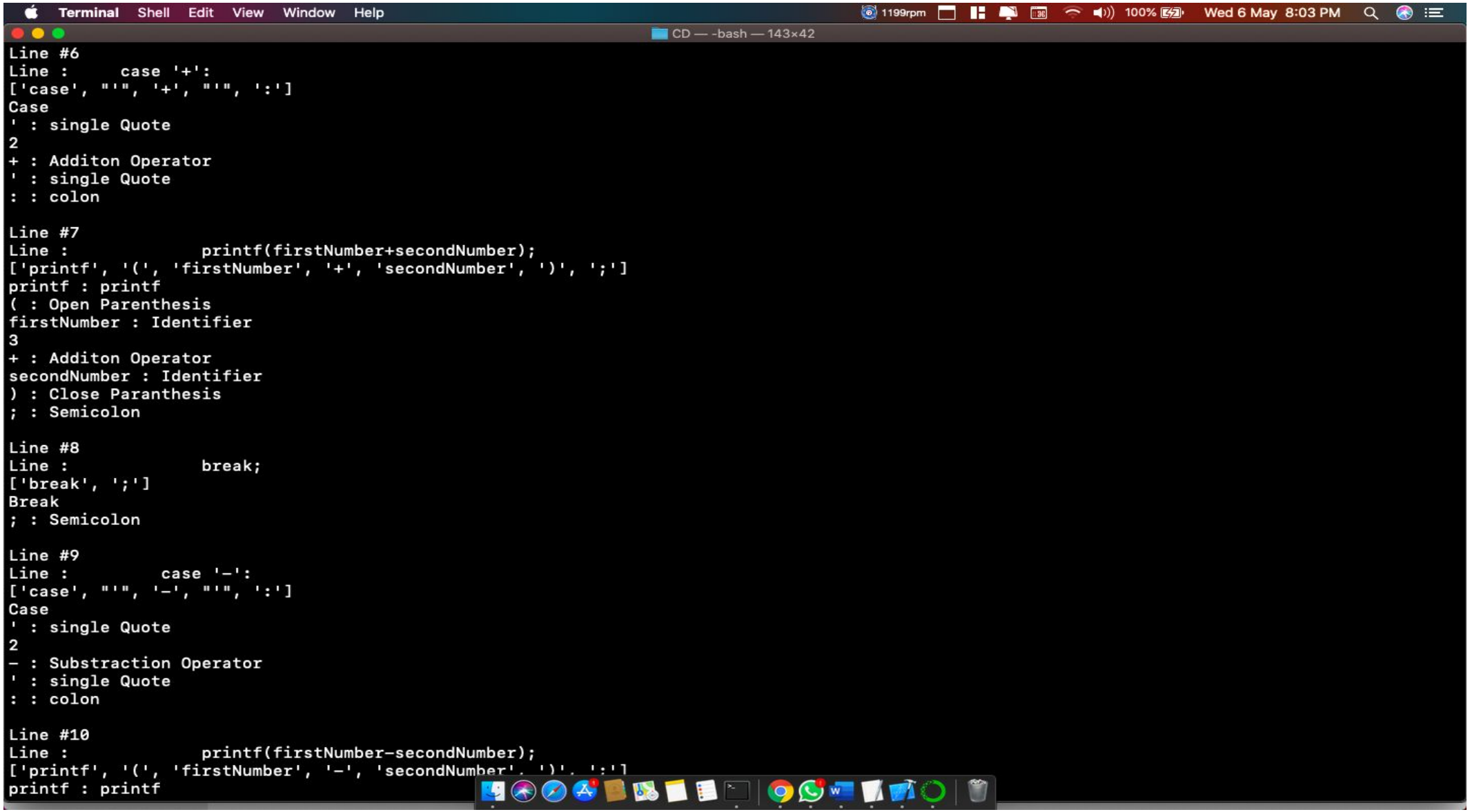
CD Project Report

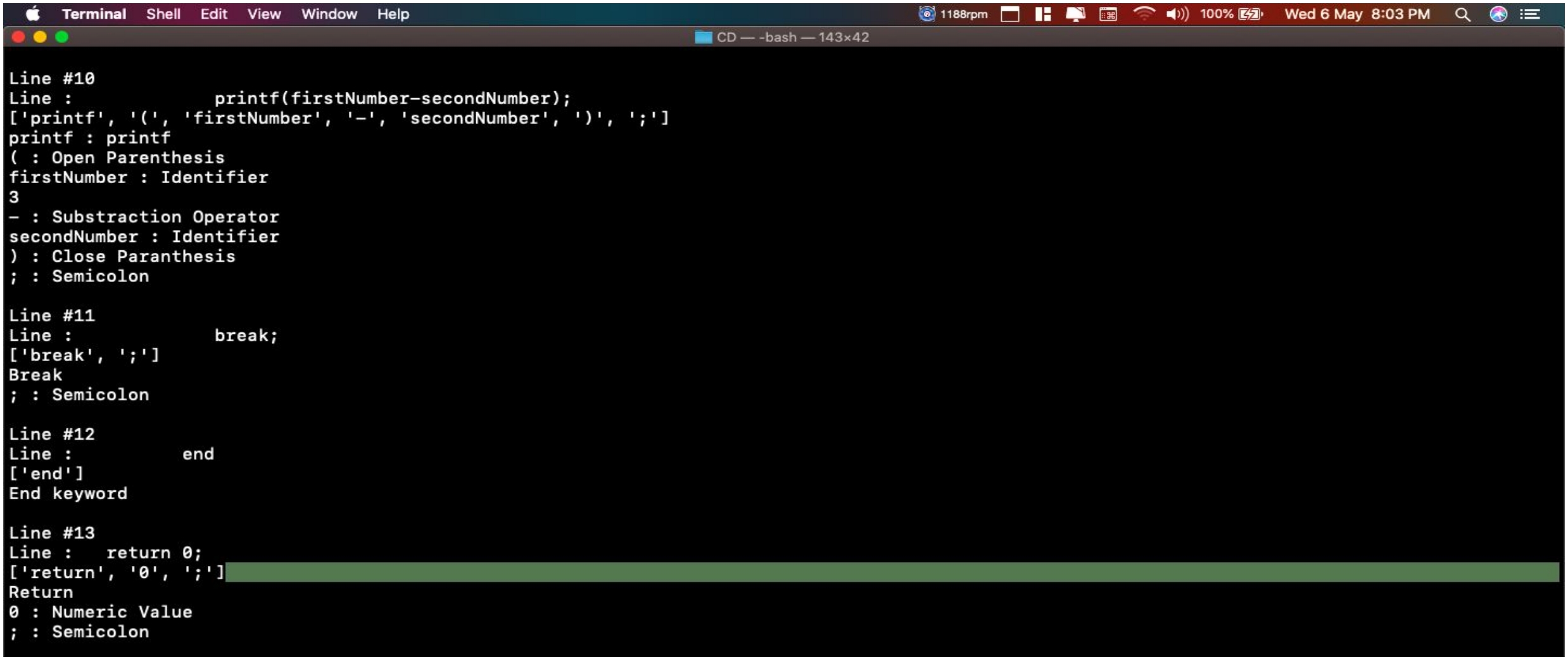
Manukashyap U V- 4NM17CS101

Manjunatha Patkar - 4NM17CS100

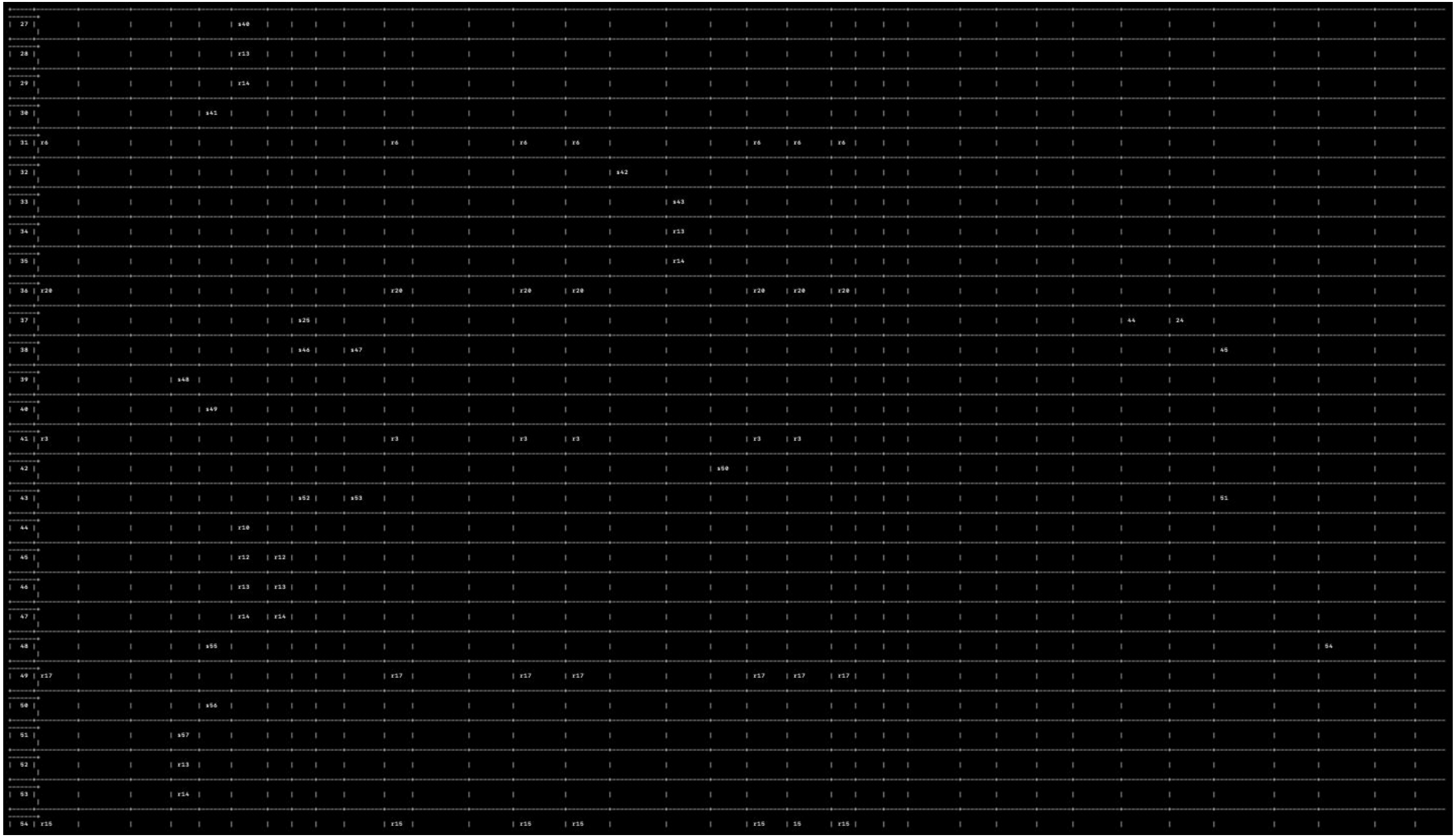
LEXICAL ANALYSIS

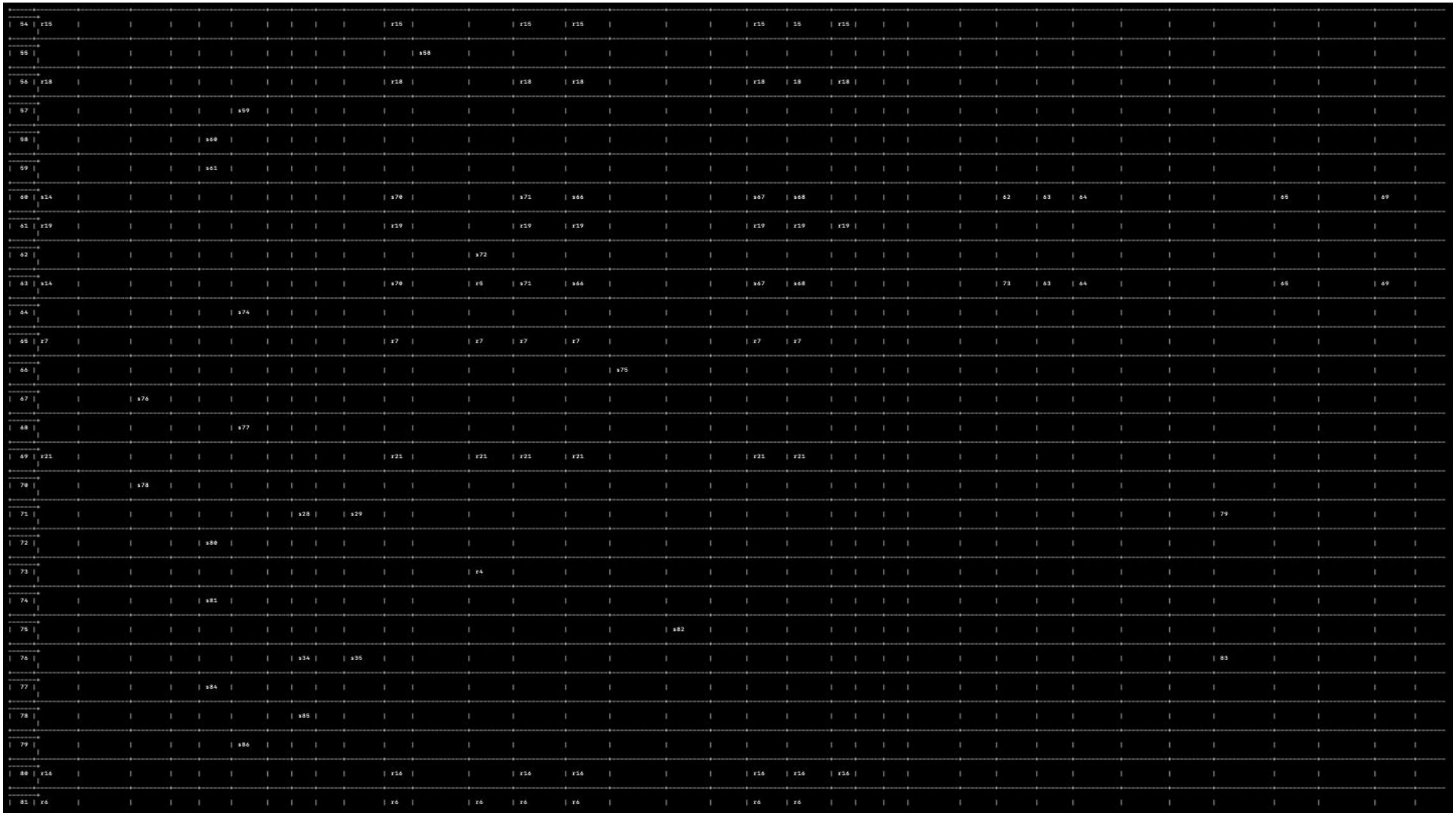


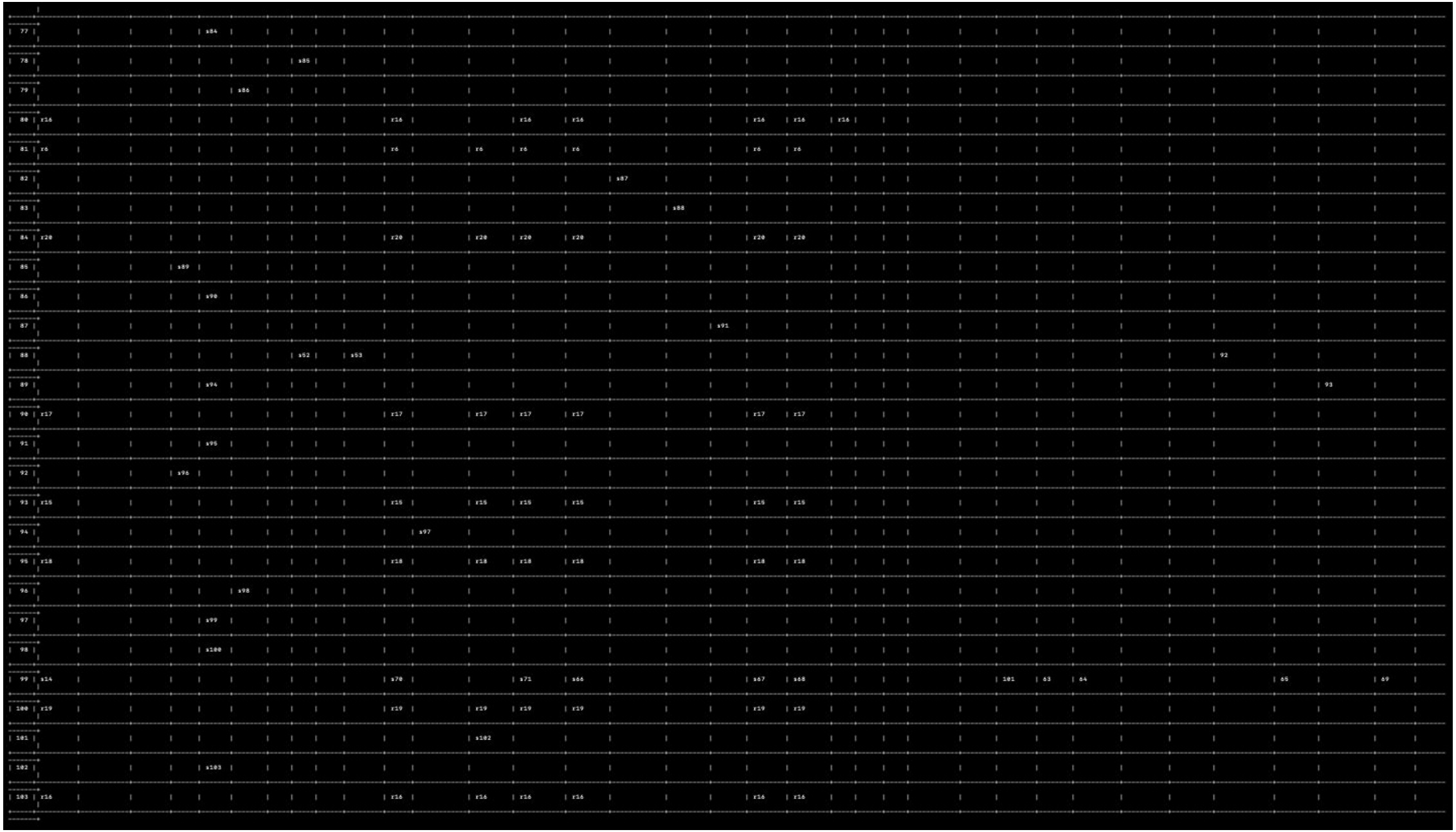

Terminal Shell Edit View Window Help
1199rpm 100% Wed 6 May 8:03 PM
CD — -bash — 143×42
Line #6
Line : case '+':
['case', "'", '+', "'", ':']
Case
' : single Quote
2
+ : Additon Operator
' : single Quote
: : colon
Line #7
Line : printf(firstNumber+secondNumber);
['printf', '(', 'firstNumber', '+', 'secondNumber', ')', ';']
printf : printf
(: Open Parenthesis
firstNumber : Identifier
3
+ : Additon Operator
secondNumber : Identifier
) : Close Paranthesis
; : Semicolon
Line #8
Line : break;
['break', ';']
Break
; : Semicolon
Line #9
Line : case '-':
['case', "'", '-', "'", ':']
Case
' : single Quote
2
- : Substraction Operator
' : single Quote
: : colon
Line #10
Line : printf(firstNumber-secondNumber);
['printf', '(', 'firstNumber', '-', 'secondNumber', ')', ';']
printf : printf


Terminal Shell Edit View Window Help
1188rpm 100% Wed 6 May 8:03 PM
CD — -bash — 143×42
Line #10
Line : printf(firstNumber-secondNumber);
['printf', '(', 'firstNumber', '-', 'secondNumber', ')', ';']
printf : printf
(: Open Parenthesis
firstNumber : Identifier
3
- : Substraction Operator
secondNumber : Identifier
) : Close Paranthesis
; : Semicolon
Line #11
Line : break;
['break', ';']
Break
; : Semicolon
Line #12
Line : end
['end']
End keyword
Line #13
Line : return 0;
['return', '0', ';']
Return
0 : Numeric Value
; : Semicolon

States	datatype	begin	NL	end	main	(	)	SC	comma	id	equals_to	number	operator	switch	condition	return	case	break	printf	$	S'	S	MAINFUNC	MAIN	STMTS	STMT	DECLARE	DECVARS	DECVAR	EXPRESSION	VARNUM	WHILESTMT	WSTMT	RETURN STMT
0	s2																					1													
1																				acc															
2		s5																					3	4												
3																				r1															
4	s14									s15			s16	s10				s11	s12						6	7	8					9		13	
5			s17																																
6																				r2															
7	s14									s15			s16	s10				s11	s12	r5					18	7	8					9		13	
8						s19																													
9	r7									r7			r7	r7				r7	r7	r7															
10															s20																				
11			s21																																
12						s22																													
13	r21									r21			r21	r21				r21	r21	r21															
14								s25																					23	24					
15			s26																																
16								s28		s29																					27				
17				s30																															
18																				r4															
19					s31																														
20																	s32																		
21								s34		s35																					33				
22					s36																														
23						r8																													
24						r9	s37																												
25						r11	r11		s38																										
26								s39																											







SEQUENTIAL PARSING STEPS:

Stack	Input	Action
0	datatype main ( ) NL datatype id SC NL datatype id comma id SC NL switch (id) NL begin NL case ' operator ' : NL printf (id operator id) SC NL break SC NL case ' operator ' : NL printf (id operator id) SC NL break SC NL end NL return number SC NL $	s2
0 datatype 2	main ( ) NL datatype id SC NL datatype id comma id SC NL switch (id) NL begin NL case ' operator ' : NL printf (id operator id) SC NL break SC NL case ' operator ' : NL printf (id operator id) SC NL break SC NL end NL return number SC NL $	s5
0 datatype 2 main 5	( ) NL datatype id SC NL datatype id comma id SC NL switch (id) NL begin NL case ' operator ' : NL printf (id operator id) SC NL break SC NL case ' operator ' : NL printf (id operator id) SC NL break SC NL end NL return number SC NL $	s17
0 datatype 2 main 5 (17	) NL datatype id SC NL datatype id comma id SC NL switch (id) NL begin NL case ' operator ' : NL printf (id operator id) SC NL break SC NL case ' operator ' : NL printf (id operator id) SC NL break SC NL end NL return number SC NL $	s30
0 datatype 2 main 5 (17) 30	NL datatype id SC NL datatype id comma id SC NL switch (id) NL begin NL case ' operator ' : NL printf (id operator id) SC NL break SC NL case ' operator ' : NL printf (id operator id) SC NL break SC NL end NL return number SC NL $	s41

0 datatype 2 main 5 (17) 30 NL 41	datatype id SC NL datatype id comma id SC NL switch (id) NL begin NL case ' operator ' : NL printf (id operator id) SC NL break SC NL case ' operator ' : NL printf (id operator id) SC NL break SC NL end NL return number SC NL $	r3
0 datatype 2 MAIN 4	datatype id SC NL datatype id comma id SC NL switch (id) NL begin NL case ' operator ' : NL printf (id operator id) SC NL break SC NL case ' operator ' : NL printf (id operator id) SC NL break SC NL end NL return number SC NL $	s14
0 datatype 2 MAIN 4 datatype 14	id SC NL datatype id comma id SC NL switch (id) NL begin NL case ' operator ' : NL printf (id operator id) SC NL break SC NL case ' operator ' : NL printf (id operator id) SC NL break SC NL end NL return number SC NL $	s25
0 datatype 2 MAIN 4 datatype 14 id 25	SC NL datatype id comma id SC NL switch (id) NL begin NL case ' operator ' : NL printf (id operator id) SC NL break SC NL case ' operator ' : NL printf (id operator id) SC NL break SC NL end NL return number SC NL $	r11
0 datatype 2 MAIN 4 datatype 14 DECVAR 24	SC NL datatype id comma id SC NL switch (id) NL begin NL case ' operator ' : NL printf (id operator id) SC NL break SC NL case ' operator ' : NL printf (id operator id) SC NL break SC NL end NL return number SC NL $	r9
0 datatype 2 MAIN 4 datatype 14 DECVARS 23	SC NL datatype id comma id SC NL switch (id) NL begin NL case ' operator ' : NL printf (id operator id) SC NL break SC NL case ' operator ' : NL printf (id operator id) SC NL break SC NL end NL return number SC NL $	r8

0 datatype 2 MAIN 4 DECLARE 8	SC NL datatype id comma id SC NL switch (id) NL begin NL case ' operator ' : NL printf (id operator id) SC NL break SC NL case ' operator ' : NL printf (id operator id) SC NL break SC NL end NL return number SC NL $	s19
0 datatype 2 MAIN 4 DECLARE 8 SC 19	NL datatype id comma id SC NL switch (id) NL begin NL case ' operator ' : NL printf (id operator id) SC NL break SC NL case ' operator ' : NL printf (id operator id) SC NL break SC NL end NL return number SC NL $	s31
0 datatype 2 MAIN 4 DECLARE 8 SC 19 NL 31	datatype id comma id SC NL switch (id) NL begin NL case ' operator ' : NL printf (id operator id) SC NL break SC NL case ' operator ' : NL printf (id operator id) SC NL break SC NL end NL return number SC NL $	r6
0 datatype 2 MAIN 4 STMT 7	datatype id comma id SC NL switch (id) NL begin NL case ' operator ' : NL printf (id operator id) SC NL break SC NL case ' operator ' : NL printf (id operator id) SC NL break SC NL end NL return number SC NL $	s14
0 datatype 2 MAIN 4 STMT 7 datatype 14	id comma id SC NL switch (id) NL begin NL case ' operator ' : NL printf (id operator id) SC NL break SC NL case ' operator ' : NL printf (id operator id) SC NL break SC NL end NL return number SC NL $	s25
0 datatype 2 MAIN 4 STMT 7 datatype 14 id 25	comma id SC NL switch (id) NL begin NL case ' operator ' : NL printf (id operator id) SC NL break SC NL case ' operator ' : NL printf (id operator id) SC NL break SC NL end NL return number SC NL $	r11
0 datatype 2 MAIN 4 STMT 7 datatype 14 DECVAR 24	comma id SC NL switch (id) NL begin NL case ' operator ' : NL printf (id operator id) SC NL	s37

0 datatype 2 MAIN 4 STMT 7 datatype 14 DECVAR 24	comma id SC NL switch (id) NL begin NL case ' operator ' : NL printf (id operator id) SC NL break SC NL case ' operator ' : NL printf (id operator id) SC NL break SC NL end NL return number SC NL $	s37
0 datatype 2 MAIN 4 STMT 7 datatype 14 DECVAR 24 comma 37	id SC NL switch (id) NL begin NL case ' operator ' : NL printf (id operator id) SC NL break SC NL case ' operator ' : NL printf (id operator id) SC NL break SC NL end NL return number SC NL $	s25
0 datatype 2 MAIN 4 STMT 7 datatype 14 DECVAR 24 comma 37 id 25	SC NL switch (id) NL begin NL case ' operator ' : NL printf (id operator id) SC NL break SC NL case ' operator ' : NL printf (id operator id) SC NL break SC NL end NL return number SC NL $	r11
0 datatype 2 MAIN 4 STMT 7 datatype 14 DECVAR 24 comma 37 DECVAR 24	SC NL switch (id) NL begin NL case ' operator ' : NL printf (id operator id) SC NL break SC NL case ' operator ' : NL printf (id operator id) SC NL break SC NL end NL return number SC NL $	r9
0 datatype 2 MAIN 4 STMT 7 datatype 14 DECVAR 24 comma 37 DECVARS 44	SC NL switch (id) NL begin NL case ' operator ' : NL printf (id operator id) SC NL break SC NL case ' operator ' : NL printf (id operator id) SC NL break SC NL end NL return number SC NL $	r10
0 datatype 2 MAIN 4 STMT 7 datatype 14 DECVARS 23	SC NL switch (id) NL begin NL case ' operator ' : NL printf (id operator id) SC NL break SC NL case ' operator ' : NL printf (id operator id) SC NL break SC NL end NL return number SC NL $	r8
0 datatype 2 MAIN 4 STMT 7 DECLARE 8	SC NL switch (id) NL begin NL case ' operator ' : NL printf (id operator id) SC NL break SC	s19

0 datatype 2 MAIN 4 STMT 7 DECLARE 8	SC NL switch (id) NL begin NL case ' operator ' : NL printf (id operator id) SC NL break SC NL case ' operator ' : NL printf (id operator id) SC NL break SC NL end NL return number SC NL $	s19
0 datatype 2 MAIN 4 STMT 7 DECLARE 8 SC 19	NL switch (id) NL begin NL case ' operator ' : NL printf (id operator id) SC NL break SC NL case ' operator ' : NL printf (id operator id) SC NL break SC NL end NL return number SC NL $	s31
0 datatype 2 MAIN 4 STMT 7 DECLARE 8 SC 19 NL 31	switch (id) NL begin NL case ' operator ' : NL printf (id operator id) SC NL break SC NL case ' operator ' : NL printf (id operator id) SC NL break SC NL end NL return number SC NL $	r6
0 datatype 2 MAIN 4 STMT 7 STMT 7	switch (id) NL begin NL case ' operator ' : NL printf (id operator id) SC NL break SC NL case ' operator ' : NL printf (id operator id) SC NL break SC NL end NL return number SC NL $	s15
0 datatype 2 MAIN 4 STMT 7 STMT 7 switch 15	(id) NL begin NL case ' operator ' : NL printf (id operator id) SC NL break SC NL case ' operator ' : NL printf (id operator id) SC NL break SC NL end NL return number SC NL $	s26
0 datatype 2 MAIN 4 STMT 7 STMT 7 switch 15 (26	id) NL begin NL case ' operator ' : NL printf (id operator id) SC NL break SC NL case ' operator ' : NL printf (id operator id) SC NL break SC NL end NL return number SC NL $	s39
0 datatype 2 MAIN 4 STMT 7 STMT 7 switch 15 (26 id 39	) NL begin NL case ' operator ' : NL printf (id operator id) SC NL break SC NL case ' operator ' : NL printf (id operator id) SC NL break SC NL end NL return number SC NL $	s48

0 datatype 2 MAIN 4 STMT 7 STMT 7 switch 15 (26 id 39) 48	NL begin NL case ' operator ' : NL printf (id operator id) SC NL break SC NL case ' operator ' : NL printf (id operator id) SC NL break SC NL end NL return number SC NL $	s55
0 datatype 2 MAIN 4 STMT 7 STMT 7 switch 15 (26 id 39) 48 NL 55	begin NL case ' operator ' : NL printf (id operator id) SC NL break SC NL case ' operator ' : NL printf (id operator id) SC NL break SC NL end NL return number SC NL $	s58
0 datatype 2 MAIN 4 STMT 7 STMT 7 switch 15 (26 id 39) 48 NL 55 begin 58	NL case ' operator ' : NL printf (id operator id) SC NL break SC NL case ' operator ' : NL printf (id operator id) SC NL break SC NL end NL return number SC NL $	s60
0 datatype 2 MAIN 4 STMT 7 STMT 7 switch 15 (26 id 39) 48 NL 55 begin 58 NL 60	case ' operator ' : NL printf (id operator id) SC NL break SC NL case ' operator ' : NL printf (id operator id) SC NL break SC NL end NL return number SC NL $	s66
0 datatype 2 MAIN 4 STMT 7 STMT 7 switch 15 (26 id 39) 48 NL 55 begin 58 NL 60 case 66	' operator ' : NL printf (id operator id) SC NL break SC NL case ' operator ' : NL printf (id operator id) SC NL break SC NL end NL return number SC NL $	s75
0 datatype 2 MAIN 4 STMT 7 STMT 7 switch 15 (26 id 39) 48 NL 55 begin 58 NL 60 case 66 ' 75	operator ' : NL printf (id operator id) SC NL break SC NL case ' operator ' : NL printf (id operator id) SC NL break SC NL end NL return number SC NL $	s82
0 datatype 2 MAIN 4 STMT 7 STMT 7 switch 15 (26 id 39) 48 NL 55 begin 58 NL 60 case 66 ' 75 operator 82	' : NL printf (id operator id) SC NL break SC NL case ' operator ' : NL printf (id operator id) SC NL break SC NL end NL return number SC NL $	s87
0 datatype 2 MAIN 4 STMT 7 STMT 7 switch 15 (26 id 39) 48 NL 55 begin 58 NL 60 case 66 ' 75 operator 82 ' 87	: NL printf (id operator id) SC NL break SC NL case ' operator ' : NL printf (id operator id) SC NL break SC NL end NL return number SC NL $	s91

0 datatype 2 MAIN 4 STMT 7 STMT 7 switch 15 (26 id 39) 48 NL 55 begin 58 NL 60 case 66 ' 75 operator 82 ' 87 : 91	NL printf (id operator id) SC NL break SC NL case ' operator ' : NL printf (id operator id) SC NL break SC NL end NL return number SC NL $	s95
0 datatype 2 MAIN 4 STMT 7 STMT 7 switch 15 (26 id 39) 48 NL 55 begin 58 NL 60 case 66 ' 75 operator 82 ' 87 : 91 NL 95	printf (id operator id) SC NL break SC NL case ' operator ' : NL printf (id operator id) SC NL break SC NL end NL return number SC NL $	r18
0 datatype 2 MAIN 4 STMT 7 STMT 7 switch 15 (26 id 39) 48 NL 55 begin 58 NL 60 STMT 63	printf (id operator id) SC NL break SC NL case ' operator ' : NL printf (id operator id) SC NL break SC NL end NL return number SC NL $	s67
0 datatype 2 MAIN 4 STMT 7 STMT 7 switch 15 (26 id 39) 48 NL 55 begin 58 NL 60 STMT 63 printf 67	(id operator id) SC NL break SC NL case ' operator ' : NL printf (id operator id) SC NL break SC NL end NL return number SC NL $	s76
0 datatype 2 MAIN 4 STMT 7 STMT 7 switch 15 (26 id 39) 48 NL 55 begin 58 NL 60 STMT 63 printf 67 (76	id operator id) SC NL break SC NL case ' operator ' : NL printf (id operator id) SC NL break SC NL end NL return number SC NL $	s34
0 datatype 2 MAIN 4 STMT 7 STMT 7 switch 15 (26 id 39) 48 NL 55 begin 58 NL 60 STMT 63 printf 67 (76 id 34	operator id) SC NL break SC NL case ' operator ' : NL printf (id operator id) SC NL break SC NL end NL return number SC NL $	r13
0 datatype 2 MAIN 4 STMT 7 STMT 7 switch 15 (26 id 39) 48 NL 55 begin 58 NL 60 STMT 63 printf 67 (76 VARNUM 83	operator id) SC NL break SC NL case ' operator ' : NL printf (id operator id) SC NL break SC NL end NL return number SC NL $	s88
0 datatype 2 MAIN 4 STMT 7 STMT 7 switch 15 (26 id 39) 48 NL 55 begin 58 NL 60 STMT 63 printf 67 (76 VARNUM 83 operator 88	id) SC NL break SC NL case ' operator ' : NL printf (id operator id) SC NL break SC NL end NL return number SC NL $	s52
0 datatype 2 MAIN 4 STMT 7 STMT 7 switch 15 (26 id 39) 48 NL 55 begin 58 NL 60 STMT 63 printf 67 (76 VARNUM 83 operator 88 id 52	) SC NL break SC NL case ' operator ' : NL printf (id operator id) SC NL break SC NL end NL return number SC NL $	r13

0 datatype 2 MAIN 4 STMT 7 STMT 7 switch 15 (26 id 39) 48 NL 55 begin 58 NL 60 STMT 63 printf 67 (76 VARNUM 83 operator 88 VARNUM 92	) SC NL break SC NL case ' operator ' : NL printf (id operator id) SC NL break SC NL end NL return number SC NL $	s96
0 datatype 2 MAIN 4 STMT 7 STMT 7 switch 15 (26 id 39) 48 NL 55 begin 58 NL 60 STMT 63 printf 67 (76 VARNUM 83 operator 88 VARNUM 92) 96	SC NL break SC NL case ' operator ' : NL printf (id operator id) SC NL break SC NL end NL return number SC NL $	s98
0 datatype 2 MAIN 4 STMT 7 STMT 7 switch 15 (26 id 39) 48 NL 55 begin 58 NL 60 STMT 63 printf 67 (76 VARNUM 83 operator 88 VARNUM 92) 96 SC 98	NL break SC NL case ' operator ' : NL printf (id operator id) SC NL break SC NL end NL return number SC NL $	s100
0 datatype 2 MAIN 4 STMT 7 STMT 7 switch 15 (26 id 39) 48 NL 55 begin 58 NL 60 STMT 63 printf 67 (76 VARNUM 83 operator 88 VARNUM 92) 96 SC 98 NL 100	break SC NL case ' operator ' : NL printf (id operator id) SC NL break SC NL end NL return number SC NL $	r19
0 datatype 2 MAIN 4 STMT 7 STMT 7 switch 15 (26 id 39) 48 NL 55 begin 58 NL 60 STMT 63 STMT 63	break SC NL case ' operator ' : NL printf (id operator id) SC NL break SC NL end NL return number SC NL $	s68
0 datatype 2 MAIN 4 STMT 7 STMT 7 switch 15 (26 id 39) 48 NL 55 begin 58 NL 60 STMT 63 STMT 63 break 68	SC NL case ' operator ' : NL printf (id operator id) SC NL break SC NL end NL return number SC NL $	s77
0 datatype 2 MAIN 4 STMT 7 STMT 7 switch 15 (26 id 39) 48 NL 55 begin 58 NL 60 STMT 63 STMT 63 break 68 SC 77	NL case ' operator ' : NL printf (id operator id) SC NL break SC NL end NL return number SC NL $	s84
0 datatype 2 MAIN 4 STMT 7 STMT 7 switch 15 (26 id 39) 48 NL 55 begin 58 NL 60 STMT 63 STMT 63 break 68 SC 77 NL 84	case ' operator ' : NL printf (id operator id) SC NL break SC NL end NL return number SC NL $	r20
0 datatype 2 MAIN 4 STMT 7 STMT 7 switch 15 (26 id 39) 48 NL 55 begin 58 NL 60 STMT 63 STMT 63 STMT 63	case ' operator ' : NL printf (id operator id) SC NL break SC NL end NL return number SC NL $	s66
0 datatype 2 MAIN 4 STMT 7 STMT 7 switch 15 (26 id 39) 48 NL	' operator ' : NL printf (id operator id) SC NL break SC NL	s75

0 datatype 2 MAIN 4 STMT 7 STMT 7 switch 15 (26 id 39) 48 NL 55 begin 58 NL 60 STMT 63 STMT 63 STMT 63 case 66	' operator ' : NL printf (id operator id) SC NL break SC NL end NL return number SC NL $	s75
0 datatype 2 MAIN 4 STMT 7 STMT 7 switch 15 (26 id 39) 48 NL 55 begin 58 NL 60 STMT 63 STMT 63 STMT 63 case 66 ' 75	operator ' : NL printf (id operator id) SC NL break SC NL end NL return number SC NL $	s82
0 datatype 2 MAIN 4 STMT 7 STMT 7 switch 15 (26 id 39) 48 NL 55 begin 58 NL 60 STMT 63 STMT 63 STMT 63 case 66 ' 75 operator 82	' : NL printf (id operator id) SC NL break SC NL end NL return number SC NL $	s87
0 datatype 2 MAIN 4 STMT 7 STMT 7 switch 15 (26 id 39) 48 NL 55 begin 58 NL 60 STMT 63 STMT 63 STMT 63 case 66 ' 75 operator 82 ' 87	: NL printf (id operator id) SC NL break SC NL end NL return number SC NL $	s91
0 datatype 2 MAIN 4 STMT 7 STMT 7 switch 15 (26 id 39) 48 NL 55 begin 58 NL 60 STMT 63 STMT 63 STMT 63 case 66 ' 75 operator 82 ' 87 : 91	NL printf (id operator id) SC NL break SC NL end NL return number SC NL $	s95
0 datatype 2 MAIN 4 STMT 7 STMT 7 switch 15 (26 id 39) 48 NL 55 begin 58 NL 60 STMT 63 STMT 63 STMT 63 case 66 ' 75 operator 82 ' 87 : 91 NL 95	printf (id operator id) SC NL break SC NL end NL return number SC NL $	r18
0 datatype 2 MAIN 4 STMT 7 STMT 7 switch 15 (26 id 39) 48 NL 55 begin 58 NL 60 STMT 63 STMT 63 STMT 63 STMT 63	printf (id operator id) SC NL break SC NL end NL return number SC NL $	s67
0 datatype 2 MAIN 4 STMT 7 STMT 7 switch 15 (26 id 39) 48 NL 55 begin 58 NL 60 STMT 63 STMT 63 STMT 63 STMT 63 printf 67	(id operator id) SC NL break SC NL end NL return number SC NL $	s76
0 datatype 2 MAIN 4 STMT 7 STMT 7 switch 15 (26 id 39) 48 NL 55 begin 58 NL 60 STMT 63 STMT 63 STMT 63 STMT 63 printf 67 (76	id operator id) SC NL break SC NL end NL return number SC NL $	s34
0 datatype 2 MAIN 4 STMT 7 STMT	operator id) SC NL break SC NL	r13

0 datatype 2 MAIN 4 STMT 7 STMT 7 switch 15 (26 id 39) 48 NL 55 begin 58 NL 60 STMT 63 STMT 63 STMT 63 STMT 63 printf 67 (76	id operator id) SC NL break SC NL end NL return number SC NL $	s34
0 datatype 2 MAIN 4 STMT 7 STMT 7 switch 15 (26 id 39) 48 NL 55 begin 58 NL 60 STMT 63 STMT 63 STMT 63 STMT 63 printf 67 (76 id 34	operator id) SC NL break SC NL end NL return number SC NL $	r13
0 datatype 2 MAIN 4 STMT 7 STMT 7 switch 15 (26 id 39) 48 NL 55 begin 58 NL 60 STMT 63 STMT 63 STMT 63 STMT 63 printf 67 (76 VARNUM 83	operator id) SC NL break SC NL end NL return number SC NL $	s88
0 datatype 2 MAIN 4 STMT 7 STMT 7 switch 15 (26 id 39) 48 NL 55 begin 58 NL 60 STMT 63 STMT 63 STMT 63 STMT 63 printf 67 (76 VARNUM 83 operator 88	id) SC NL break SC NL end NL return number SC NL $	s52
0 datatype 2 MAIN 4 STMT 7 STMT 7 switch 15 (26 id 39) 48 NL 55 begin 58 NL 60 STMT 63 STMT 63 STMT 63 STMT 63 printf 67 (76 VARNUM 83 operator 88 id 52	) SC NL break SC NL end NL return number SC NL $	r13
0 datatype 2 MAIN 4 STMT 7 STMT 7 switch 15 (26 id 39) 48 NL 55 begin 58 NL 60 STMT 63 STMT 63 STMT 63 STMT 63 printf 67 (76 VARNUM 83 operator 88 VARNUM 92	) SC NL break SC NL end NL return number SC NL $	s96
0 datatype 2 MAIN 4 STMT 7 STMT 7 switch 15 (26 id 39) 48 NL 55 begin 58 NL 60 STMT 63 STMT 63 STMT 63 STMT 63 printf 67 (76 VARNUM 83 operator 88 VARNUM 92) 96	SC NL break SC NL end NL return number SC NL $	s98
0 datatype 2 MAIN 4 STMT 7 STMT 7 switch 15 (26 id 39) 48 NL 55 begin 58 NL 60 STMT 63 STMT 63 STMT 63 STMT 63 printf 67 (76 VARNUM 83 operator 88 VARNUM 92) 96 SC 98	NL break SC NL end NL return number SC NL $	s100

0 datatype 2 MAIN 4 STMT 7 STMT 7 switch 15 (26 id 39) 48 NL 55 begin 58 NL 60 STMT 63 STMT 63 STMT 63 STMT 63 printf 67 (76 VARNUM 83 operator 88 VARNUM 92) 96 SC 98 NL 100	break SC NL end NL return number SC NL $	r19
0 datatype 2 MAIN 4 STMT 7 STMT 7 switch 15 (26 id 39) 48 NL 55 begin 58 NL 60 STMT 63 STMT 63 STMT 63 STMT 63 STMT 63	break SC NL end NL return number SC NL $	s68
0 datatype 2 MAIN 4 STMT 7 STMT 7 switch 15 (26 id 39) 48 NL 55 begin 58 NL 60 STMT 63 STMT 63 STMT 63 STMT 63 STMT 63 break 68	SC NL end NL return number SC NL $	s77
0 datatype 2 MAIN 4 STMT 7 STMT 7 switch 15 (26 id 39) 48 NL 55 begin 58 NL 60 STMT 63 STMT 63 STMT 63 STMT 63 STMT 63 break 68 SC 77	NL end NL return number SC NL $	s84
0 datatype 2 MAIN 4 STMT 7 STMT 7 switch 15 (26 id 39) 48 NL 55 begin 58 NL 60 STMT 63 STMT 63 STMT 63 STMT 63 STMT 63 break 68 SC 77 NL 84	end NL return number SC NL $	r20
0 datatype 2 MAIN 4 STMT 7 STMT 7 switch 15 (26 id 39) 48 NL 55 begin 58 NL 60 STMT 63 STMT 63 STMT 63 STMT 63 STMT 63 STMT 63	end NL return number SC NL $	r5
0 datatype 2 MAIN 4 STMT 7 STMT 7 switch 15 (26 id 39) 48 NL 55 begin 58 NL 60 STMT 63 STMT 63 STMT 63 STMT 63 STMT 63 STMTS 73	end NL return number SC NL $	r4
0 datatype 2 MAIN 4 STMT 7 STMT 7 switch 15 (26 id 39) 48 NL 55 begin 58 NL 60 STMT 63 STMT 63 STMT 63 STMT 63 STMTS 73	end NL return number SC NL $	r4
0 datatype 2 MAIN 4 STMT 7 STMT 7 switch 15 (26 id 39) 48 NL 55 begin 58 NL 60 STMT 63 STMT 63 STMT 63 STMTS 73	end NL return number SC NL $	r4

0 datatype 2 MAIN 4 STMT 7 STMT 7 switch 15 (26 id 39) 48 NL 55 begin 58 NL 60 STMT 63 STMT 63 STMTS 73	end NL return number SC NL $	r4
0 datatype 2 MAIN 4 STMT 7 STMT 7 switch 15 (26 id 39) 48 NL 55 begin 58 NL 60 STMT 63 STMTS 73	end NL return number SC NL $	r4
0 datatype 2 MAIN 4 STMT 7 STMT 7 switch 15 (26 id 39) 48 NL 55 begin 58 NL 60 STMTS 62	end NL return number SC NL $	s72
0 datatype 2 MAIN 4 STMT 7 STMT 7 switch 15 (26 id 39) 48 NL 55 begin 58 NL 60 STMTS 62 end 72	NL return number SC NL $	s80
0 datatype 2 MAIN 4 STMT 7 STMT 7 switch 15 (26 id 39) 48 NL 55 begin 58 NL 60 STMTS 62 end 72 NL 80	return number SC NL $	r16
0 datatype 2 MAIN 4 STMT 7 STMT 7 switch 15 (26 id 39) 48 SWTCH 54	return number SC NL $	r15
0 datatype 2 MAIN 4 STMT 7 STMT 7 SWITCHSTMT 9	return number SC NL $	r7
0 datatype 2 MAIN 4 STMT 7 STMT 7 STMT 7	return number SC NL $	s16
0 datatype 2 MAIN 4 STMT 7 STMT 7 STMT 7 return 16	number SC NL $	s29
0 datatype 2 MAIN 4 STMT 7 STMT 7 STMT 7 return 16 number 29	SC NL $	r14
0 datatype 2 MAIN 4 STMT 7 STMT 7 STMT 7 return 16 VARNUM 27	SC NL $	s40
0 datatype 2 MAIN 4 STMT 7 STMT 7 STMT 7 return 16 VARNUM 27 SC 40	NL $	s49
0 datatype 2 MAIN 4 STMT 7 STMT 7 STMT 7 return 16 VARNUM 27 SC 40 NL 49	$	r17

55 begin 58 NL 60 STMTS 62 end 72 NL 80		
0 datatype 2 MAIN 4 STMT 7 STMT 7 switch 15 (26 id 39) 48 SWTCH 54	return number SC NL $	r15
0 datatype 2 MAIN 4 STMT 7 STMT 7 SWITCHSTMT 9	return number SC NL $	r7
0 datatype 2 MAIN 4 STMT 7 STMT 7 STMT 7	return number SC NL $	s16
0 datatype 2 MAIN 4 STMT 7 STMT 7 STMT 7 return 16	number SC NL $	s29
0 datatype 2 MAIN 4 STMT 7 STMT 7 STMT 7 return 16 number 29	SC NL $	r14
0 datatype 2 MAIN 4 STMT 7 STMT 7 STMT 7 return 16 VARNUM 27	SC NL $	s40
0 datatype 2 MAIN 4 STMT 7 STMT 7 STMT 7 return 16 VARNUM 27 SC 40	NL $	s49
0 datatype 2 MAIN 4 STMT 7 STMT 7 STMT 7 return 16 VARNUM 27 SC 40 NL 49	$	r17
0 datatype 2 MAIN 4 STMT 7 STMT 7 STMT 7 RETURSTMT 13	$	r21
0 datatype 2 MAIN 4 STMT 7 STMT 7 STMT 7 STMT 7	$	r5
0 datatype 2 MAIN 4 STMT 7 STMT 7 STMT 7 STMTS 18	$	r4
0 datatype 2 MAIN 4 STMT 7 STMT 7 STMTS 18	$	r4
0 datatype 2 MAIN 4 STMT 7 STMTS 18	$	r4
0 datatype 2 MAIN 4 STMTS 6	$	r2
0 datatype 2 MAINFUNC 3	$	r1
0 S 1	$	acc

(base) apple@Apples-MacBook-Air:~/Desktop/Projects/CD$

THANK YOU