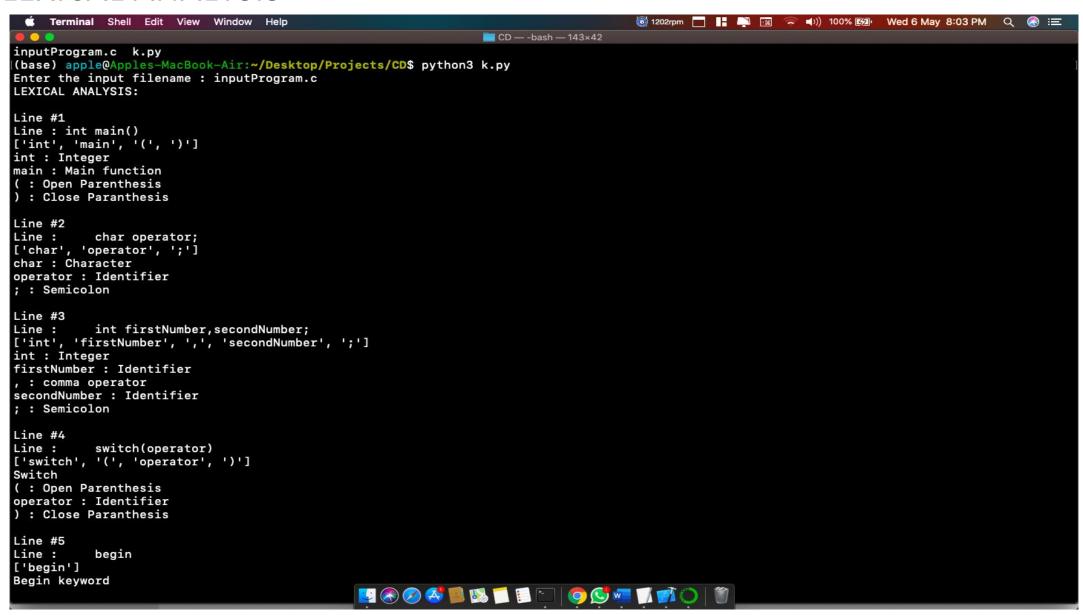
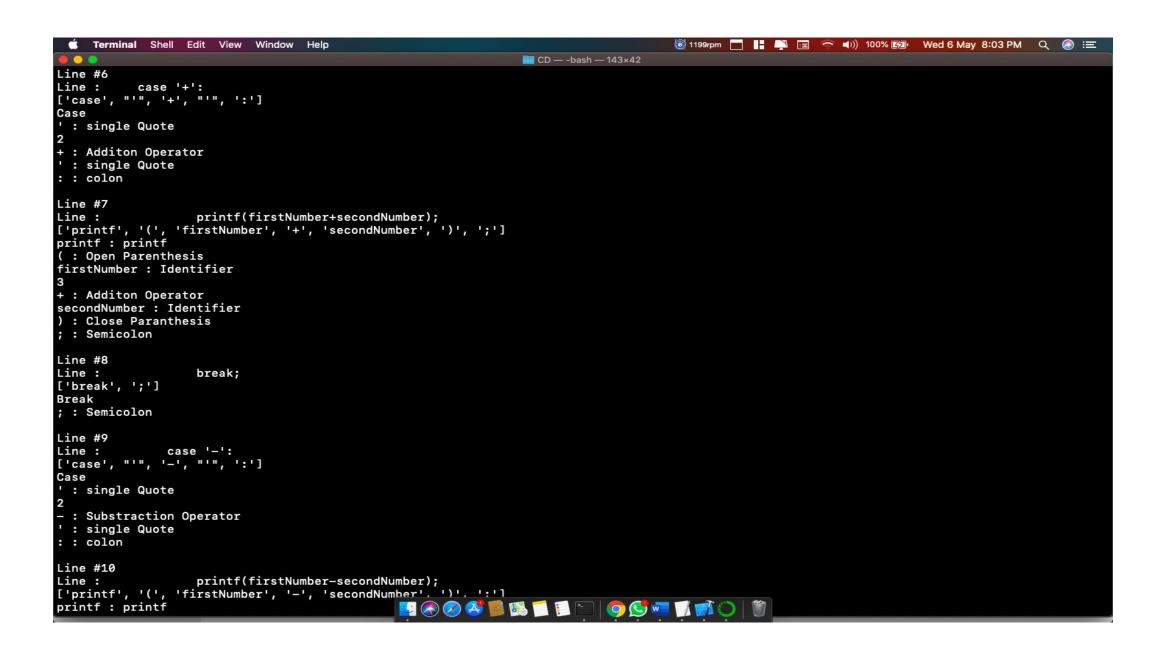
## **CD Project Report**

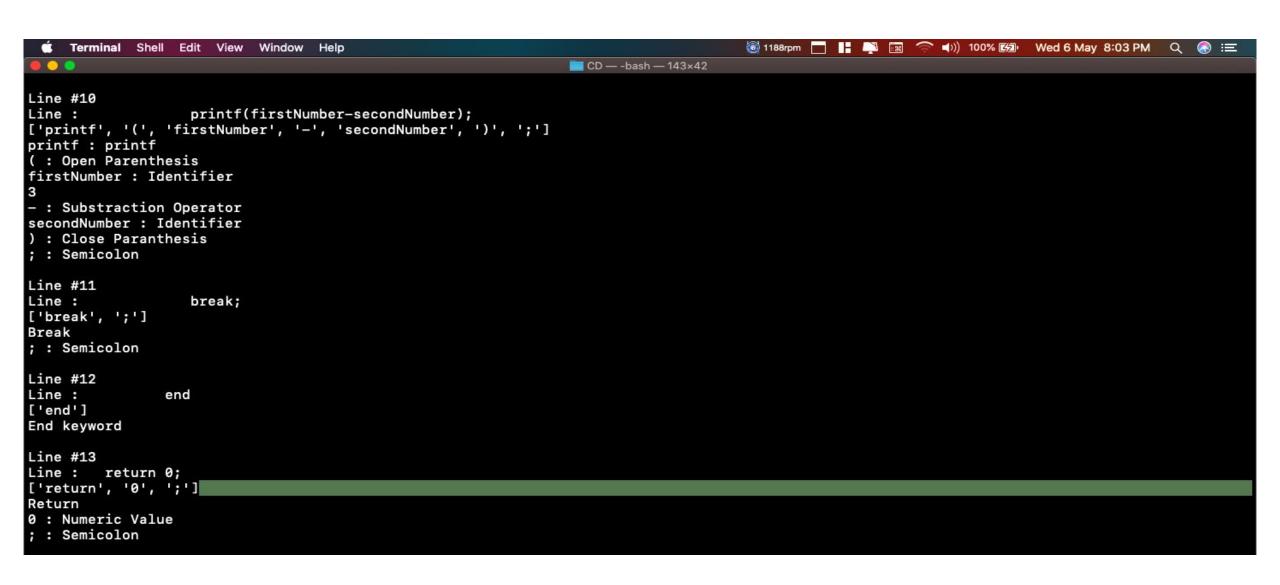
Manukashyap U V- 4NM17CS101

Manjunatha Patkar - 4NM17CS100

## LEXICAL ANALYSIS







	datatype	I heafn	I NL	Land	l main		-	1.50	Looppa	1 54	l squals to	Louebar	Longrator	Lawitch	Leandition	l ratura	1	I breek	l erietf		* 15	MAINFUNC	I MAIN	I STWTS	LSTHT	I DECLARE	I DECVARS	I DECYAR	EXPRESSION	L VARNAM	I MHILESTMT	I MSTMT	I DETURN
STMT		1								1		1								1 1			1		1			1			1	1	1
1 11																				acc													1
1 21	15																					3											, , ,
1 31																				12													1
1 4   114										115			126	110				111	112					1 6		1 .				1.		13	!
1 51	!	117	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1 1	1	1	1	1	1	1	1	1	!	1	1	1	1
1 61																				r2													!
7   114										115			916	110				111	112	r5				18		1 8						13	
8					119																												!
9   17																																	!
1 10															1 120																		!
11		921																															
1 12					122																												!
13   r21										r21				r21				r21		r21													
1 24 1																											23	1 24					
15		1 126																															!
1 16 1									1 129																								
1 17																				! !													
1 18																				24													
1 20 1																132																	
21									135																				33				
22																																	1
23					r8																												1
1 24 1					19	137	1																										1
1 25 1					r11	r11		138																									1
1 26 1							131	9 1																									1

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28					r13																												
1 29 1			1	1	r14	1		1						1			1	i	1	1 1		1		1	1	,		1		1	,		
30	ı	1	1	141	,	,	1	1	1	,	,	1	ı	1	1	ı	1	1	i	1 1	,	ı	1	1	1	1	1	1	1	1	1	ı	1
31   r6										1 =	6		r6	r6				r6	r6	r6													
32															142																		
33																143																	
1 34 1																r13																	
1 35 1																124																	
36   r20										1 :	20		r20	120				r20	r20	r20													
37							126	1																			1 44	24					
38							146	• 1	147																				46				
39			148																														
1 40 1				149																													
41   r3										1:	3		r3	13				r3	r3														
1 42 1																	150																
43							162	2	163																				61				
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1 45 1					r12	11	2																										
1 46 1					r13	r1	3																										
1 47 1					r14	r1	4.1																										
1 48 1				166																											64		
49   x17										1:	17		r17	r17				r17	r17	r17													
50				156																													
61			167																														
1 52 1			r13																														
63			¥14																														
54   r15										1 :	15		r16	r15				r15	15	r15													

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54   r15	1		!	1	!				1	r16	!	!	r16	r16	!	!	!	r15	15	r16		1	!	!	!	!		!	!	!	!	,	
1 55	!		!	!	1				1	!	1 158	1	!	1	1	!	!	!	!	1 1			!	!	!	!	1	1		1	1	1	
56   r18	1	1	1	!	1				1	r18	1	1	r18	r18	1	!	1	r18	18	r18	1	1	1	!	!	1	1	1		1	1	1	1
1 57	1		!	!	159	1			1	1	1	1	!	1	1	1	!	!	1	1 1	!	1	!	!	!	1	1	1	1	1	1	1	
58	!	!	!	160	1				!	!	1	!	!	!	!	!	!	!	!	1 1		!	!	!	!	!	!	!	!	1	!	!	!
59				161	1						!				!				!	1 1						!	!	!	!		!		!
60   514	!	!		!	!				!	170	!	!	171	166	!	!	!	167	1 168	1 1		!	1	62	63	1 64	!	!	!	65	!	69	!
61   r19										119			r19	119				r19	r19	r19													!
62												172																					!
63   514										170		r6	172	166				167	1 168						63	64				66		69	!
1 64 1					174																												1
65   r7										z7			27	17					z7														!
66															175																		!
67		176						!																									!
68					1 177																												!
69   r21										r21		r21	r21	r21				r21	r21														!
70		178						!																									!
72							128	!	1 129																				79				!
1 72 1				180																													!
73												1 14																					!
74				181																													!
75																182																	!
1 76 1							134	!	135																				83				!
1 77 1				184																													!
78							185																										
79					186			!																									!
80   r16								!		r16			r16	r16				r16	r16	r16													!
81   r6										r6		r6	r6	r6				r6	r6														1

!																																
1 77				184																												
78							185															!										
79	!	1	!	!	1 186	1	!!	!	!	!	1	!	!	!	1	1	!	!	1	!	!	!	!	!	1	!	!	!	!	!	!	
80   ri6									r16			r16	F16				r16	r16	r16													
81   r6	1	1	,	,	1	1	, ,		r6	1	r6	r6	r6	1	1	1	r6	r6	1		,	1		ı	1	1	1	1	1	1	1	1
82														187						, ,												,
83															188					, ,												,
84   r20									r20		120	r20	r20				r20	r20														
85			189																													,
86				190																												
87																191				1 1												
88	1	,	,	1	,	1	162	1 153	1	,	1	1	,	,	1	1	1	1	1	, ,	,	1	,	1	1	1	1	92	1	,	1	
1 89 1				1 194																		1								93		,
90   r17	1	,	,	1	,	1	1 1	1	r17	1	r17	r17	r17	1	1	1	r17	r17	1		1	 1	,	1	1	1	1	1	1	1	1	,
92	i	,	,	195	1	1	1 1		ı	1	1	ı	1	1	1	1	ı	1	1		,	1		ı	1	1	1	1	1	1	1	
1 92	1	,	1 196	1	,	1	1 1	1	1	!	1	1	1	,	1	1	1	1	1		,	1	1	i	1	1	,	1	!	,	1	
93   r15	1	,	,	,	,	1	, ,	ı	r16		r15	r15	r15	,	1	,	r15	r16	1	, ,	i	1	,	i	,	,	1	1		,	1	
1 94 1	ı	,	,	ı	ı	1	1 1	1	1	197	1	i	,	,	ı	1	1	i	1	, ,	i	 1	ı	i	1	1	ı	i	i	i	ı	,
95   r18	ı	,	,	1	,	1	1 1	1	r18	,	r18	r18	r18	,	1	1	r18	r18	1		1	 1	1	1	1	1	1	1	,	ı	ı	,
1 96 1	!	!	!	!	1 198				!		!	!	!	!	!	!	1	!	,						!	!	!	!	!	!	!	
1 97 1	1	!	!	1 199	,	1		1	,	!	!	!	!	,	1	1	1	i	1		,	1	!		1	!	!	!	!	!	,	
1 98 1	!	!	!	1100	,			1	!	!	!	!	!	!	!	1	1	i	1		!		!	!	!	!	!	!	!	!	,	
99   314									1 170			171	166				1 167	168					101	63	1 64				65		69	
100   r19	i	,	,	1	ı	1	1 1		r19	!	119	r19	r19	,	1	1	r19	119	1		,	ı		1	1	1	!	i		!	,	
101											102																					
102				1103																, ,												
103   r16									r16		r16	r16	r16				r16	r16		1												
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## 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 logerator 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 NL break SC NL end NL return number SC NL \$	s41

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 NL break SC NL end NL return number SC NL \$	r3
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
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
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
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
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
	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 \$  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 case ' operator id ) SC NL break SC NL end NL return number SC NL \$  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 case ' operator ': NL printf ( id operator id ) SC NL break SC NL end NL return number SC NL \$  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 switch ( id ) NL begin NL case ' operator ': NL printf ( id operator id ) SC NL break SC NL end NL return number SC NL \$  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 switch ( id ) NL begin NL case ' operator ': NL printf ( id operator id ) SC NL break SC NL end NL return number SC NL \$  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 end NL return number SC NL \$  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 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 case ' operator ': NL printf ( id operator id ) SC NL break SC 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 case ' operator ': NL printf ( id

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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   

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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	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

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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

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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 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

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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	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 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 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 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	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 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 STMT	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

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end NL return number SC NL \$	r4
end NL return number SC NL \$	r4
end NL return number SC NL \$	s72
NL return number SC NL \$   	s80
return number SC NL \$   	r16
return number SC NL \$	r15
return number SC NL \$	r7
return number SC NL \$	s16
number SC NL \$ 	s29
SC NL \$	r14
SC NL \$	s40
NL \$	s49
\$ 	r17
	end NL return number SC NL \$  end NL return number SC NL \$  NL return number SC NL \$  SC NL \$  SC NL \$  NL \$

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

## THANK YOU