Example1

```
Parsing a Program ....
1-1:KW_PROGRAM
1-9:TK_IDENT(Example1)
1-17:SB_SEMICOLON
Parsing a Block ....
Parsing Block 2 ....
Parsing Block 3 ....
Parsing Block 4 ....
Parsing subroutines ....
Subroutines parsed ....
2-1:KW_BEGIN
3-1:KW_END
Block parsed!
3-5:SB_PERIOD
Program parsed!
Example2
Parsing a Program ....
1-1:KW_PROGRAM
1-9:TK_IDENT(Example2)
1-17:SB_SEMICOLON
Parsing a Block ....
Parsing Block 2 ....
Parsing Block 3 ....
3-1:KW_VAR
3-5:TK_IDENT(n)
3-7:SB_COLON
3-9:KW_INTEGER
3-16:SB_SEMICOLON
```

```
Parsing Block 4 ....
Parsing subroutines ....
Parsing a function ....
5-1:KW_FUNCTION
5-10:TK_IDENT(F)
5-11:SB_LPAR
5-12:TK_IDENT(n)
5-14:SB_COLON
5-16:KW_INTEGER
5-23:SB_RPAR
5-25:SB_COLON
5-27:KW_INTEGER
5-34:SB_SEMICOLON
Parsing a Block ....
Parsing Block 2 ....
Parsing Block 3 ....
Parsing Block 4 ....
Parsing subroutines ....
Subroutines parsed ....
F6-3:KW_BEGIN
Parsing an if statement ....
7-5:KW_IF
Parsing an expression
7-8:TK_IDENT(n)
Expression parsed
7-10:SB_EQ
Parsing an expression
7-12:TK_NUMBER(0)
Expression parsed
7-14:KW_THEN
```

```
Parsing an assign statement ....
7-19:TK_IDENT(F)
7-22:SB_ASSIGN
Parsing an expression
7-24:TK_NUMBER(1)
Expression parsed
Assign statement parsed ....
7-26:KW_ELSE
Parsing an assign statement ....
7-31:TK_IDENT(F)
7-34:SB_ASSIGN
Parsing an expression
7-36:TK_IDENT(N)
7-38:SB_TIMES
7-40:TK_IDENT(F)
7-42:SB_LPAR
Parsing an expression
7-43:TK_IDENT(N)
7-45:SB_MINUS
7-47:TK_NUMBER(1)
Expression parsed
7-48:SB_RPAR
Expression parsed
Assign statement parsed ....
If statement parsed ....
7-49:SB_SEMICOLON
8-3:KW_END
Block parsed!
8-6:SB_SEMICOLON
Function parsed ....
```

```
Subroutines parsed ....
F10-1:KW_BEGIN
Parsing a for statement ....
11-3:KW_FOR
11-7:TK_IDENT(n)
11-10:SB_ASSIGN
Parsing an expression
11-12:TK_NUMBER(1)
Expression parsed
11-14:KW_TO
Parsing an expression
11-17:TK_NUMBER(7)
Expression parsed
11-19:KW_DO
Parsing a group statement ....
12-5:KW_BEGIN
Parsing a call statement ....
13-7:KW_CALL
13-12:TK_IDENT(WriteLn)
Call statement parsed ....
13-19:SB_SEMICOLON
Parsing a call statement ....
14-7:KW_CALL
14-12:TK_IDENT(WriteI)
14-18:SB_LPAR
Parsing an expression
14-20:TK_IDENT(F)
14-21:SB_LPAR
Parsing an expression
14-22:TK_IDENT(n)
```

```
Expression parsed
14-23:SB_RPAR
Expression parsed
14-24:SB_RPAR
Call statement parsed ....
14-25:SB_SEMICOLON
15-5:KW_END
Group statement parsed ....
For statement parsed ....
15-8:SB_SEMICOLON
16-1:KW_END
Block parsed!
16-5:SB_PERIOD
Program parsed!
Example 3
Parsing a Program ....
1-1:KW_PROGRAM
1-10:TK_IDENT(EXAMPLE3)
1-18:SB_SEMICOLON
Parsing a Block ....
Parsing Block 2 ....
Parsing Block 3 ....
2-1:KW_VAR
2-6:TK_IDENT(I)
2-7:SB_COLON
2-8:KW_INTEGER
2-15:SB_SEMICOLON
3-6:TK_IDENT(N)
3-7:SB_COLON
```

- 3-8:KW_INTEGER
- 3-15:SB_SEMICOLON
- 4-6:TK_IDENT(P)
- 4-7:SB_COLON
- 4-8:KW_INTEGER
- 4-15:SB_SEMICOLON
- 5-6:TK_IDENT(Q)
- 5-7:SB_COLON
- 5-8:KW_INTEGER
- 5-15:SB_SEMICOLON
- 6-6:TK_IDENT(C)
- 6-7:SB_COLON
- 6-8:KW_CHAR
- 6-12:SB_SEMICOLON
- Parsing Block 4
- Parsing subroutines
- Parsing a procedure
- 8-1:KW_PROCEDURE
- 8-12:TK_IDENT(HANOI)
- 8-17:SB_LPAR
- 8-18:TK_IDENT(N)
- 8-19:SB_COLON
- 8-20:KW_INTEGER
- 8-27:SB_SEMICOLON
- 8-30:TK_IDENT(S)
- 8-31:SB_COLON
- 8-32:KW_INTEGER
- 8-39:SB_SEMICOLON
- 8-42:TK_IDENT(Z)
- 8-43:SB_COLON

```
8-44:KW_INTEGER
8-51:SB_RPAR
8-52:SB_SEMICOLON
Parsing a Block ....
Parsing Block 2 ....
Parsing Block 3 ....
Parsing Block 4 ....
Parsing subroutines ....
Subroutines parsed ....
9-1:KW_BEGIN
Parsing an if statement ....
10-3:KW_IF
Parsing an expression
10-7:TK_IDENT(N)
Expression parsed
10-10:SB_NEQ
Parsing an expression
10-12:TK_NUMBER(0)
Expression parsed
10-15:KW_THEN
Parsing a group statement ....
11-5:KW_BEGIN
Parsing a call statement ....
12-7:KW_CALL
12-13:TK_IDENT(HANOI)
12-18:SB_LPAR
Parsing an expression
12-19:TK_IDENT(N)
12-20:SB_MINUS
12-21:TK_NUMBER(1)
```

```
Expression parsed
12-22:SB_COMMA
Parsing an expression
12-23:TK_IDENT(S)
Expression parsed
12-24:SB_COMMA
Parsing an expression
12-25:TK_NUMBER(6)
12-26:SB_MINUS
12-27:TK_IDENT(S)
12-28:SB_MINUS
12-29:TK_IDENT(Z)
Expression parsed
12-30:SB_RPAR
Call statement parsed ....
12-31:SB_SEMICOLON
Parsing an assign statement ....
13-7:TK_IDENT(I)
13-9:SB_ASSIGN
Parsing an expression
13-10:TK_IDENT(I)
13-11:SB_PLUS
13-12:TK_NUMBER(1)
Expression parsed
Assign statement parsed ....
13-13:SB_SEMICOLON
Parsing a call statement ....
14-7:KW_CALL
14-13:TK_IDENT(WRITELN)
Call statement parsed ....
```

```
14-20:SB_SEMICOLON
Parsing a call statement ....
15-7:KW_CALL
15-13:TK_IDENT(WRITEI)
15-19:SB_LPAR
Parsing an expression
15-20:TK_IDENT(I)
Expression parsed
15-21:SB_RPAR
Call statement parsed ....
15-22:SB_SEMICOLON
Parsing a call statement ....
16-7:KW_CALL
16-13:TK_IDENT(WRITEI)
16-19:SB_LPAR
Parsing an expression
16-20:TK_IDENT(N)
Expression parsed
16-21:SB_RPAR
Call statement parsed ....
16-22:SB_SEMICOLON
Parsing a call statement ....
17-7:KW_CALL
17-13:TK_IDENT(WRITEI)
17-19:SB_LPAR
Parsing an expression
17-20:TK_IDENT(S)
Expression parsed
17-21:SB_RPAR
Call statement parsed ....
```

```
17-22:SB_SEMICOLON
```

Parsing a call statement

18-7:KW_CALL

18-13:TK_IDENT(WRITEI)

18-19:SB_LPAR

Parsing an expression

18-20:TK_IDENT(Z)

Expression parsed

18-21:SB_RPAR

Call statement parsed

18-22:SB_SEMICOLON

Parsing a call statement

19-7:KW_CALL

19-13:TK_IDENT(HANOI)

19-18:SB_LPAR

Parsing an expression

19-19:TK_IDENT(N)

19-20:SB_MINUS

19-21:TK_NUMBER(1)

Expression parsed

19-22:SB_COMMA

Parsing an expression

19-23:TK_NUMBER(6)

19-24:SB_MINUS

19-25:TK_IDENT(S)

19-26:SB_MINUS

19-27:TK_IDENT(Z)

Expression parsed

19-28:SB_COMMA

Parsing an expression

```
19-29:TK_IDENT(Z)
Expression parsed
19-30:SB_RPAR
Call statement parsed ....
20-5:KW_END
Group statement parsed ....
If statement parsed ....
21-1:KW_END
Block parsed!
21-4:SB_SEMICOLON
Procedure parsed ....
Subroutines parsed ....
23-1:KW_BEGIN
Parsing a for statement ....
24-3:KW_FOR
24-8:TK_IDENT(N)
24-11:SB_ASSIGN
Parsing an expression
24-13:TK_NUMBER(1)
Expression parsed
24-16:KW_TO
Parsing an expression
24-20:TK_NUMBER(4)
Expression parsed
24-23:KW_DO
Parsing a group statement ....
25-5:KW_BEGIN
Parsing a for statement ....
26-7:KW_FOR
26-12:TK_IDENT(I)
```

```
26-14:SB_ASSIGN
Parsing an expression
26-15:TK_NUMBER(1)
Expression parsed
26-18:KW_TO
Parsing an expression
26-22:TK_NUMBER(4)
Expression parsed
26-25:KW_DO
Parsing a call statement ....
27-9:KW_CALL
27-15:TK_IDENT(WRITEC)
27-21:SB_LPAR
Parsing an expression
27-23:TK_CHAR(' ')
Expression parsed
27-25:SB_RPAR
Call statement parsed ....
For statement parsed ....
27-26:SB_SEMICOLON
Parsing an assign statement ....
28-7:TK_IDENT(C)
28-10:SB_ASSIGN
Parsing an expression
28-13:TK_IDENT(READC)
Expression parsed
Assign statement parsed ....
28-18:SB_SEMICOLON
Parsing a call statement ....
29-7:KW_CALL
```

```
29-13:TK_IDENT(WRITEC)
29-19:SB_LPAR
Parsing an expression
29-20:TK_IDENT(C)
Expression parsed
29-21:SB_RPAR
Call statement parsed ....
30-5:KW_END
Group statement parsed ....
For statement parsed ....
30-8:SB_SEMICOLON
Parsing an assign statement ....
31-3:TK_IDENT(P)
31-5:SB_ASSIGN
Parsing an expression
31-6:TK_NUMBER(1)
Expression parsed
Assign statement parsed ....
31-7:SB_SEMICOLON
Parsing an assign statement ....
32-3:TK_IDENT(Q)
32-5:SB_ASSIGN
Parsing an expression
32-6:TK_NUMBER(2)
Expression parsed
Assign statement parsed ....
32-7:SB_SEMICOLON
Parsing a for statement ....
33-3:KW_FOR
33-8:TK_IDENT(N)
```

```
33-10:SB_ASSIGN
```

Parsing an expression

33-11:TK_NUMBER(2)

Expression parsed

33-14:KW_TO

Parsing an expression

33-18:TK_NUMBER(4)

Expression parsed

33-21:KW_DO

Parsing a group statement

34-5:KW_BEGIN

Parsing an assign statement

35-7:TK_IDENT(I)

35-9:SB_ASSIGN

Parsing an expression

35-10:TK_NUMBER(0)

Expression parsed

Assign statement parsed

35-11:SB_SEMICOLON

Parsing a call statement

36-7:KW_CALL

36-13:TK_IDENT(HANOI)

36-18:SB_LPAR

Parsing an expression

36-19:TK_IDENT(N)

Expression parsed

36-20:SB_COMMA

Parsing an expression

36-21:TK_IDENT(P)

Expression parsed

```
36-22:SB_COMMA
Parsing an expression
36-23:TK_IDENT(Q)
Expression parsed
36-24:SB_RPAR
Call statement parsed ....
36-25:SB_SEMICOLON
Parsing a call statement ....
37-7:KW_CALL
37-13:TK_IDENT(WRITELN)
Call statement parsed ....
38-5:KW_END
Group statement parsed ....
For statement parsed ....
39-1:KW_END
Block parsed!
39-5:SB_PERIOD
Program parsed!
Example 4
Parsing a Program ....
1-1:KW_PROGRAM
1-10:TK_IDENT(EXAMPLE4)
1-18:SB_SEMICOLON
Parsing a Block ....
2-1:KW_CONST
2-7:TK_IDENT(MAX)
2-11:SB_EQ
2-13:TK_NUMBER(10)
2-15:SB_SEMICOLON
```

```
Parsing Block 2 ....
3-1:KW_TYPE
3-6:TK_IDENT(T)
3-8:SB_EQ
3-10:KW_INTEGER
3-17:SB_SEMICOLON
Parsing Block 3 ....
4-1:KW_VAR
4-6:TK_IDENT(A)
4-8:SB_COLON
4-10:KW_ARRAY
4-15:SB_LSEL
4-18:TK_NUMBER(10)
4-22:SB_RSEL
4-24:KW_OF
4-27:TK_IDENT(T)
4-28:SB_SEMICOLON
5-6:TK_IDENT(N)
5-8:SB_COLON
5-10:KW_INTEGER
5-17:SB_SEMICOLON
6-6:TK_IDENT(CH)
6-9:SB_COLON
6-11:KW_CHAR
6-15:SB_SEMICOLON
Parsing Block 4 ....
Parsing subroutines ....
Parsing a procedure ....
8-1:KW_PROCEDURE
8-11:TK_IDENT(INPUT)
```

```
8-16:SB_SEMICOLON
Parsing a Block ....
Parsing Block 2 ....
Parsing Block 3 ....
9-1:KW_VAR
9-5:TK_IDENT(I)
9-7:SB_COLON
9-9:KW_INTEGER
9-16:SB_SEMICOLON
10-5:TK_IDENT(TMP)
10-9:SB_COLON
10-11:KW_INTEGER
10-18:SB_SEMICOLON
Parsing Block 4 ....
Parsing subroutines ....
Subroutines parsed ....
11-1:KW_BEGIN
Parsing an assign statement ....
12-3:TK_IDENT(N)
12-6:SB_ASSIGN
Parsing an expression
12-8:TK_IDENT(READI)
Expression parsed
Assign statement parsed ....
12-13:SB_SEMICOLON
Parsing a for statement ....
13-3:KW_FOR
13-7:TK_IDENT(I)
13-10:SB_ASSIGN
Parsing an expression
```

```
13-12:TK_NUMBER(1)
Expression parsed
13-14:KW_TO
Parsing an expression
13-17:TK_IDENT(N)
Expression parsed
13-19:KW_DO
Parsing an assign statement ....
14-6:TK_IDENT(A)
14-7:SB_LSEL
Parsing an expression
14-9:TK_IDENT(I)
Expression parsed
14-11:SB_RSEL
14-14:SB_ASSIGN
Parsing an expression
14-16:TK_IDENT(READI)
Expression parsed
Assign statement parsed ....
For statement parsed ....
14-21:SB_SEMICOLON
15-1:KW_END
Block parsed!
15-4:SB_SEMICOLON
Procedure parsed ....
Parsing a procedure ....
17-1:KW_PROCEDURE
17-11:TK_IDENT(OUTPUT)
17-17:SB_SEMICOLON
Parsing a Block ....
```

```
Parsing Block 2 ....
Parsing Block 3 ....
18-1:KW_VAR
18-5:TK_IDENT(I)
18-7:SB_COLON
18-9:KW_INTEGER
18-16:SB_SEMICOLON
Parsing Block 4 ....
Parsing subroutines ....
Subroutines parsed ....
19-1:KW_BEGIN
Parsing a for statement ....
20-3:KW_FOR
20-7:TK_IDENT(I)
20-10:SB_ASSIGN
Parsing an expression
20-12:TK_NUMBER(1)
Expression parsed
20-14:KW_TO
Parsing an expression
20-17:TK_IDENT(N)
Expression parsed
20-19:KW_DO
Parsing a group statement ....
21-6:KW_BEGIN
Parsing a call statement ....
22-8:KW_CALL
22-13:TK_IDENT(WRITEI)
22-19:SB_LPAR
Parsing an expression
```

```
22-20:TK_IDENT(A)
22-21:SB_LSEL
Parsing an expression
22-23:TK_IDENT(I)
Expression parsed
22-25:SB_RSEL
Expression parsed
22-26:SB_RPAR
Call statement parsed ....
22-27:SB_SEMICOLON
Parsing a call statement ....
23-8:KW_CALL
23-13:TK_IDENT(WRITELN)
Call statement parsed ....
23-20:SB_SEMICOLON
24-6:KW_END
Group statement parsed ....
For statement parsed ....
25-1:KW_END
Block parsed!
25-4:SB_SEMICOLON
Procedure parsed ....
Parsing a function ....
27-1:KW_FUNCTION
27-10:TK_IDENT(SUM)
27-14:SB_COLON
27-16:KW_INTEGER
27-23:SB_SEMICOLON
Parsing a Block ....
Parsing Block 2 ....
```

```
Parsing Block 3 ....
28-1:KW_VAR
28-5:TK_IDENT(I)
28-6:SB_COLON
28-8:KW_INTEGER
28-15:SB_SEMICOLON
29-5:TK_IDENT(S)
29-7:SB_COLON
29-9:KW_INTEGER
29-16:SB_SEMICOLON
Parsing Block 4 ....
Parsing subroutines ....
Subroutines parsed ....
30-1:KW_BEGIN
Parsing an assign statement ....
31-5:TK_IDENT(S)
31-8:SB_ASSIGN
Parsing an expression
31-10:TK_NUMBER(0)
Expression parsed
Assign statement parsed ....
31-11:SB_SEMICOLON
Parsing an assign statement ....
32-5:TK_IDENT(I)
32-8:SB_ASSIGN
Parsing an expression
32-10:TK_NUMBER(1)
Expression parsed
Assign statement parsed ....
32-11:SB_SEMICOLON
```

```
Parsing a while statement ....
33-5:KW_WHILE
Parsing an expression
33-11:TK_IDENT(I)
Expression parsed
33-14:SB_LE
Parsing an expression
33-16:TK_IDENT(N)
Expression parsed
33-18:KW_DO
Parsing a group statement ....
34-6:KW_BEGIN
Parsing an assign statement ....
35-8:TK_IDENT(S)
35-11:SB_ASSIGN
Parsing an expression
35-13:TK_IDENT(S)
35-15:SB_PLUS
35-17:TK_IDENT(A)
35-18:SB_LSEL
Parsing an expression
35-20:TK_IDENT(I)
Expression parsed
35-22:SB_RSEL
Expression parsed
Assign statement parsed ....
35-23:SB_SEMICOLON
Parsing an assign statement ....
36-8:TK_IDENT(I)
36-11:SB_ASSIGN
```

```
Parsing an expression
36-13:TK_IDENT(I)
36-15:SB_PLUS
36-17:TK_NUMBER(1)
Expression parsed
Assign statement parsed ....
36-18:SB_SEMICOLON
37-6:KW_END
Group statement parsed ....
While statement parsed ....
38-1:KW_END
Block parsed!
38-4:SB_SEMICOLON
Function parsed ....
Subroutines parsed ....
40-1:KW_BEGIN
Parsing an assign statement ....
41-4:TK_IDENT(CH)
41-8:SB_ASSIGN
Parsing an expression
41-11:TK_CHAR('y')
Expression parsed
Assign statement parsed ....
41-13:SB_SEMICOLON
Parsing a while statement ....
42-4:KW_WHILE
Parsing an expression
42-10:TK_IDENT(CH)
Expression parsed
42-13:SB_EQ
```

```
Parsing an expression
42-16:TK_CHAR('y')
Expression parsed
42-19:KW_DO
Parsing a group statement ....
43-6:KW_BEGIN
Parsing a call statement ....
44-8:KW_CALL
44-13:TK_IDENT(INPUT)
Call statement parsed ....
44-18:SB_SEMICOLON
Parsing a call statement ....
45-8:KW_CALL
45-13:TK_IDENT(OUTPUT)
Call statement parsed ....
45-19:SB_SEMICOLON
Parsing a call statement ....
46-8:KW_CALL
46-13:TK_IDENT(WRITEI)
46-19:SB_LPAR
Parsing an expression
46-20:TK_IDENT(SUM)
Expression parsed
46-23:SB_RPAR
Call statement parsed ....
46-24:SB_SEMICOLON
Parsing an assign statement ....
47-8:TK_IDENT(CH)
47-12:SB_ASSIGN
Parsing an expression
```

```
47-14:TK_IDENT(READC)
Expression parsed
Assign statement parsed ....
47-19:SB_SEMICOLON
48-6:KW_END
Group statement parsed ....
While statement parsed ....
49-1:KW_END
Block parsed!
49-5:SB_PERIOD
Program parsed!
Example 5
Parsing a Program ....
1-1:KW_PROGRAM
1-9:TK_IDENT(Example5)
1-17:SB_SEMICOLON
Parsing a Block ....
2-1:KW_CONST
2-7:TK_IDENT(c)
2-9:SB_EQ
2-11:TK_NUMBER(1)
2-12:SB_SEMICOLON
Parsing Block 2 ....
3-1:KW_TYPE
3-6:TK_IDENT(t)
3-8:SB_EQ
3-10:KW_CHAR
3-14:SB_SEMICOLON
Parsing Block 3 ....
```

```
Parsing Block 4 ....
```

Parsing subroutines

Parsing a function

- 4-1:KW_FUNCTION
- 4-10:TK_IDENT(f)
- 4-11:SB_LPAR
- 4-12:TK_IDENT(i)
- 4-14:SB_COLON
- 4-16:KW_INTEGER
- 4-23:SB_RPAR
- 4-24:SB_COLON
- 4-25:KW_CHAR
- 4-29:SB_SEMICOLON

Parsing a Block

- 5-1:KW_CONST
- 5-7:TK_IDENT(b)
- 5-9:SB_EQ
- 5-11:TK_IDENT(c)
- 5-12:SB_SEMICOLON

Parsing Block 2

- 6-1:KW_TYPE
- 6-6:TK_IDENT(a)
- 6-8:SB_EQ
- 6-10:KW_ARRAY
- 6-15:SB_LSEL
- 6-17:TK_NUMBER(5)
- 6-19:SB_RSEL
- 6-21:KW_OF
- 6-24:TK_IDENT(t)
- 6-25:SB_SEMICOLON

```
Parsing Block 3 ....
Parsing Block 4 ....
Parsing subroutines ....
Subroutines parsed ....
7-1:KW_BEGIN
8-1:KW_END
Block parsed!
8-4:SB_SEMICOLON
Function parsed ....
Subroutines parsed ....
9-1:KW_BEGIN
10-1:KW_END
Block parsed!
10-5:SB_PERIOD
Program parsed!
Example 6
Parsing a Program ....
1-1:KW_PROGRAM
1-9:TK_IDENT(Example6)
1-17:SB_SEMICOLON
Parsing a Block ....
2-4:KW_CONST
2-10:TK_IDENT(c1)
2-13:SB_EQ
2-15:TK_NUMBER(10)
2-17:SB_SEMICOLON
3-5:TK_IDENT(c2)
3-8:SB_EQ
3-11:TK_CHAR('a')
```

```
3-13:SB_SEMICOLON
```

Parsing Block 2

- 4-4:KW_TYPE
- 4-9:TK_IDENT(t1)
- 4-12:SB_EQ
- 4-14:KW_ARRAY
- 4-19:SB_LSEL
- 4-22:TK_NUMBER(10)
- 4-26:SB_RSEL
- 4-28:KW_OF
- 4-31:KW_INTEGER
- 4-38:SB_SEMICOLON

Parsing Block 3

- 5-4:KW_VAR
- 5-8:TK_IDENT(v1)
- 5-11:SB_COLON
- 5-13:KW_INTEGER
- 5-20:SB_SEMICOLON
- 6-8:TK_IDENT(v2)
- 6-11:SB_COLON
- 6-13:KW_ARRAY
- 6-18:SB_LSEL
- 6-21:TK_NUMBER(10)
- 6-25:SB_RSEL
- 6-27:KW_OF
- 6-30:TK_IDENT(t1)
- 6-32:SB_SEMICOLON

Parsing Block 4

Parsing subroutines

Parsing a function

```
8-4:KW_FUNCTION
```

- 8-13:TK_IDENT(F)
- 8-14:SB_LPAR
- 8-15:TK_IDENT(p1)
- 8-18:SB_COLON
- 8-20:KW_INTEGER
- 8-27:SB_SEMICOLON
- 8-29:KW_VAR
- 8-33:TK_IDENT(p2)
- 8-36:SB_COLON
- 8-38:KW_CHAR
- 8-42:SB_RPAR
- 8-44:SB_COLON
- 8-46:KW_INTEGER
- 8-53:SB_SEMICOLON
- Parsing a Block
- Parsing Block 2
- Parsing Block 3
- Parsing Block 4
- Parsing subroutines
- Subroutines parsed
- 9-6:KW_BEGIN
- Parsing an assign statement
- 10-8:TK_IDENT(f)
- 10-11:SB_ASSIGN
- Parsing an expression
- 10-13:TK_IDENT(c1)
- Expression parsed
- Assign statement parsed
- 10-15:SB_SEMICOLON

- 11-6:KW_END
- Block parsed!
- 11-9:SB_SEMICOLON
- Function parsed
- Parsing a procedure
- 13-4:KW_PROCEDURE
- 13-14:TK_IDENT(p)
- 13-15:SB_LPAR
- 13-16:TK_IDENT(v1)
- 13-19:SB_COLON
- 13-21:KW_INTEGER
- 13-28:SB_RPAR
- 13-29:SB_SEMICOLON
- Parsing a Block
- 14-6:KW_CONST
- 14-12:TK_IDENT(c1)
- 14-15:SB_EQ
- 14-18:TK_CHAR('a')
- 14-20:SB_SEMICOLON
- 15-12:TK_IDENT(c3)
- 15-15:SB_EQ
- 15-17:TK_NUMBER(10)
- 15-19:SB_SEMICOLON
- Parsing Block 2
- 16-6:KW_TYPE
- 16-11:TK_IDENT(t1)
- 16-14:SB_EQ
- 16-16:KW_INTEGER
- 16-23:SB_SEMICOLON
- 17-11:TK_IDENT(t2)

```
17-14:SB_EQ
```

17-16:KW_ARRAY

17-21:SB_LSEL

17-24:TK_NUMBER(10)

17-28:SB_RSEL

17-30:KW_OF

17-33:TK_IDENT(t1)

17-35:SB_SEMICOLON

Parsing Block 3

18-6:KW_VAR

18-10:TK_IDENT(v2)

18-13:SB_COLON

18-15:TK_IDENT(t2)

18-17:SB_SEMICOLON

19-10:TK_IDENT(v3)

19-13:SB_COLON

19-15:KW_CHAR

19-19:SB_SEMICOLON

Parsing Block 4

Parsing subroutines

Subroutines parsed

20-6:KW_BEGIN

Parsing an assign statement

21-2:TK_IDENT(v3)

21-6:SB_ASSIGN

Parsing an expression

21-9:TK_CHAR('a')

Expression parsed

Assign statement parsed

21-11:SB_SEMICOLON

```
Parsing an assign statement ....
22-9:TK_IDENT(v1)
22-13:SB_ASSIGN
Parsing an expression
22-15:TK_IDENT(f)
22-16:SB_LPAR
Parsing an expression
22-17:TK_IDENT(c3)
Expression parsed
22-19:SB_COMMA
Parsing an expression
22-20:TK_IDENT(v3)
Expression parsed
22-22:SB_RPAR
Expression parsed
Assign statement parsed ....
22-23:SB_SEMICOLON
23-6:KW_END
Block parsed!
23-9:SB_SEMICOLON
Procedure parsed ....
Subroutines parsed ....
25-1:KW_BEGIN
Parsing a call statement ....
26-6:KW_CALL
26-11:TK_IDENT(p)
26-12:SB_LPAR
Parsing an expression
26-13:TK_IDENT(c1)
Expression parsed
```

26-15:SB_RPAR

Call statement parsed

26-16:SB_SEMICOLON

27-1:KW_END

Block parsed!

27-5:SB_PERIOD

Program parsed!