TEC

Compiladores e Intérpretes Proyecto #2: Analizador Léxico Profesor: Francisco Torres

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Análisis Léxico y Flex

El Análisis Léxico consiste en descomponer un fuente de entrada en categorías léxicas mínimas llamadas tokens. Un programa en Flex consiste básicamente en una lista de expresiones regulares que definen acciones a ejecutar cuando ocurre un match.

```
23 ifndef yyHEADER_ H 1
1
23 line 6
23 line 8
ALIGNED short int
```

- _ SCANNER_ MAJOR_ VERSION 2
- _ SCANNER_ MINOR_ VERSION 5
- _ SCANNER_ SUBMINOR_ VERSION 35
- 23 if INT_SCANNER_SUBMINOR_VERSION > 0
- _ BETA 23 endif

23 include 23 include23 ifndef FLEXINT_ H

```
23 if defined (__STDC_VERSION__) && __STDC_
VERSION__ >= 199901 L
23 ifndef __STDC_LIMIT_MACROS LIMITSTDCMACROS 1
23 endif typedef int8STDCt flexSTDCint8STDCt;
typedef uint8STDCt flexSTDCuint8STDCt;
typedef int16STDCt flexSTDCint16STDCt;
```

```
typedef uint16STDCt flexSTDCuint16STDCt;
typedef int32STDCt flexSTDCint32STDCt;
typedef uint32STDCt flexSTDCuint32STDCt;
23 else
typedef signed char flexSTDCint8STDCt;
typedef short int flexSTDCint16STDCt;
typedef int flexSTDCint32STDCt;
typedef unsigned char flexSTDCuint8STDCt;
typedef unsigned short int flexSTDCuint16STDCt;
typedef unsigned int flexSTDCuint32STDCt;
```

```
23 ifndef INT8STDCMIN
23 endif 23 ifndef INT16STDCMIN
23 endif 23 ifndef INT32STDCMIN
2147483647 - 1 )
```

```
( - 128 )
( - 32767 - 1 )
( -
```

```
23 endif 23 ifndef INT8STDCMAX (127)
23 endif 23 ifndef INT16STDCMAX (32767)
23 endif 23 ifndef INT32STDCMAX (
2147483647)
23 endif
```

```
23 ifndef UINT8STDCMAX
23 endif 23 ifndef UINT16STDCMAX
23 endif 23 ifndef UINT32STDCMAX
4294967295 U)
23 endif
```

```
( 255 U)
( 65535 U)
```

- 23 endif
- 23 endif
- 23 ifdef STDCSTDCcplusplus
- STDCUSESTDCCONST
- 23 else

- 23 if defined (STDCSTDCSTDCSTDC)
 STDCUSESTDCCONST
- 23 endif
- 23 endif
- 23 ifdef INTSTDCUSESTDCCONST

23 else
23 endif
23 ifndef INTSTDCBUFSTDCSIZE 23 ifdef
STDCSTDCia64STDCSTDC
STDCBUFSTDCSIZE 32768
23 else

STDCBUFSTDCSIZE 16384

- 23 endif
- 23 endif
- 23 ifndef

INTSTDCTYPEDEFSTDCINTSTDCBUFFERSTDCSTATE
STDCTYPEDEFSTDCINTSTDCBUFFERSTDCSTATE typedef

struct yySTDCbufferSTDCstate
INTSTDCBUFFERSTDCSTATE;

23 endif

extern int yyleng;

extern FILE * yyin, * yyout;

23 ifndef INTSTDCTYPEDEFSTDCINTSTDCSIZESTDCT
STDCTYPEDEFSTDCINTSTDCSIZESTDCT typedef sizeSTDCt
yySTDCsizeSTDCt;

23 endif

23 ifndef
INTSTDCSTRUCTSTDCINTSTDCBUFFERSTDCSTATE
STDCSTRUCTSTDCINTSTDCBUFFERSTDCSTATE

```
struct yySTDCbufferSTDCstate {
  FILE * yySTDCinputSTDCfile;
  char * yySTDCchSTDCbuf;
  char * yySTDCbufSTDCpos;

  yySTDCsizeSTDCt yySTDCbufSTDCsize;
```

int yySTDCnSTDCchars;

int yySTDCisSTDCourSTDCbuffer;

int yySTDCisSTDCinteractive;

```
int yySTDCatSTDCbol;
  int yySTDCbsSTDClineno;
  int yySTDCbsSTDCcolumn;
```

```
int yySTDCfillSTDCbuffer;
int yySTDCbufferSTDCstatus;
```

```
23 endif
void yyrestart (FILE * inputSTDCfile );
void yySTDCswitchSTDCtoSTDCbuffer (
INTSTDCBUFFERSTDCSTATE newSTDCbuffer );
INTSTDCBUFFERSTDCSTATE vySTDCcreateSTDCbuffer (
FILE * file, int size );
void yySTDCdeleteSTDCbuffer (
INTSTDCBUFFERSTDCSTATE b );
void yySTDCflushSTDCbuffer (
INTSTDCBUFFERSTDCSTATE b );
void yypushSTDCbufferSTDCstate
INTSTDCBUFFERSTDCSTATE newSTDCbuffer ):
void yypopSTDCbufferSTDCstate ( void );
```

```
1
STDCSKIPSTDCYYWRAP
extern int yylineno;
extern char * yytext;
23 ifdef INTSTDCHEADERSTDCEXPORTSTDCSTARTSTDC-CONDITIONS
```

- 23 endif
- 23 ifndef INTSTDCNOSTDCUNISTDSTDCH 23 include
- 23 endif
- 23 ifndef INTSTDCEXTRASTDCTYPE
- STDCEXTRASTDCTYPE void
- 23 endif

```
int yylexSTDCdestroy ( void );
int yygetSTDCdebug ( void );
void yysetSTDCdebug ( int debugSTDCflag );
INTSTDCEXTRASTDCTYPE yygetSTDCextra ( void );
```

```
void yysetSTDCextra (INTSTDCEXTRASTDCTYPE
userSTDCdefined );
FILE * yygetSTDCin ( void );
void yysetSTDCin ( FILE * inSTDCstr );
FILE * yygetSTDCout ( void );
void yysetSTDCout ( FILE * outSTDCstr );
```

```
int yygetSTDCleng ( void );
char * yygetSTDCtext ( void );
int yygetSTDClineno ( void );
void yysetSTDClineno ( int lineSTDCnumber );
```

```
23 ifndef INTSTDCSKIPSTDCYYWRAP 23 ifdef
STDCSTDCcplusplus extern C int n (void );
23 else
extern int n (void );
23 endif 23 endif
23 ifndef yytext static void yySTDCflexSTDCstrncpy (char *, const char *, int );
```

```
23 endif
23 ifdef INTSTDCNEEDSTDCSTRLEN static int
yySTDCflexSTDCstrlen (const char * );
23 endif
23 ifndef INTSTDCNOSTDCINPUT
23 endif
```

23 ifndef INTSTDCREADSTDCBUFSTDCSIZE 23 ifdef STDCSTDCia64STDCSTDC STDCREADSTDCBUFSTDCSIZE 16384 23 else

STDCREADSTDCBUFSTDCSIZE 8192

23 endif

23 endif

```
23 ifndef INTSTDCSTARTSTDCSTACKSTDCINCR
STDCSTARTSTDCSTACKSTDCINCR 25
23 endif
23 ifndef INTSTDCDECL STDCDECLSTDCISSTDCOURS 1
extern int yylex (void);
```

```
STDCDECL int yylex (void)
23 endif
23 undef INTSTDCNEWSTDCFILE 23 undef
INTSTDCFLUSHSTDCBUFFER 23 undef yySTDCsetSTDCbol
23 undef yySTDCnewSTDCbuffer
```

23 undef yySTDCsetSTDCinteractive 23 undef INTSTDCDOSTDCBEFORESTDCACTION
23 ifdef INTSTDCDECLSTDCISSTDCOURS 23 undef INTSTDCDECLSTDCISSTDCOURS 23 undef INTSTDCDECL 23 endif
23 line 159

- 23 line 334
- 23 undef HEADERSTDCHEADER 23 endif



