#### **Analizador Sintáctico**

Ariana Bermúdez, Ximena Bolaños, Dylan Rodríguez

Instituto Tecnológico de Costa Rica

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#### **Análisis Sintáctico**

Se hizo un analizador sintáctico con la ayuda de la herramienta de Bison, para el lenguaje C y que corre en C, este analizador trabaja en conjunto con Flex, para tomar los tokens que este le otorga y revisar con las gramáticas que les sean ingresadas.

#### **Bison**

Bison convierte de una gramática libre de contexto a un analizador sintáctico que emplea las tablas de Parsing LALR(1), siendo:

- L: Left algo
- A: ...
- L: ...
- R: rightmost
- (1): donde este uno significa que tiene como lookahead solo un símbolo.

Cabe destacar que Bison es compatible con Yacc. Sirve con C, C++ y Java.

# Código

```
/*Pruebas/main.c:1:2 syntax error, found "1" */
unsigned int __w_retcode : 8 ;
unsigned int: 16;
} __wait_terminated ;
struct
unsigned int __w_stopval : 8 ;
unsigned int __w_stopsig : 8 ;
unsigned int: 16;
} __wait_stopped ;
```

```
typedef union
union wait * __uptr ;
int * __iptr ;
} __WAIT_STATUS __attribute__ ( ( __transparent_union__
typedef struct
int quot;
int rem :
} div_t ;
typedef struct
long int quot;
```

```
long int rem;
} ldiv_t ;
__extension__ typedef struct
long long int quot;
long long int rem;
} Ildiv_t :
extern size_t __ctype_get_mb_cur_max ( void )
   __attribute__ ( ( __nothrow__ , __leaf__ ) ) ;
extern double atof ( const char * __nptr )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __pure__ ) ) __attribute__ ( (
   _{-}nonnull_{-} (1));
extern int atoi ( const char * __nptr )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __pure__ ) ) __attribute__ ( (
   _{-}nonnull_{-} (1));
extern long int atol ( const char * __nptr )
```

```
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __pure__ ) ) __attribute__ ( (
   _{-}nonnull_{-} (1));
__extension__ extern long long int atoll ( const char *
    __nptr )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __pure__ ) ) __attribute__ ( (
   _{-}nonnull_{-} (1));
extern double strtod ( const char * __restrict __nptr ,
char * * __restrict __endptr )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __nonnull__ ( 1 ) ) );
extern float strtof ( const char * __restrict __nptr ,
char * * __restrict __endptr ) __attribute__ ( (
   __nothrow__ , __leaf__ ) ) __attribute__ ( (
   _{-}nonnull_{-} (1));
extern long double strtold ( const char * __restrict
   __nptr ,
char * * __restrict __endptr )
```

```
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __nonnull__ ( 1 ) ) );
extern unsigned long int strtoul ( const char *
   __restrict __nptr ,
char * * __restrict __endptr , int __base )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __nonnull__ ( 1 ) ) );
extension
extern long long int strtoq ( const char * __restrict
   __nptr ,
char * * __restrict __endptr , int __base )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   _{-attribute_{--}} ( ( _{-nonnull_{--}} ( 1 ) ) ;
__extension__
extern unsigned long long int strtoug ( const char *
   __restrict __nptr ,
char * * __restrict __endptr , int __base )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __nonnull__ ( 1 ) ) );
```

```
extern long long int strtoll ( const char * __restrict
   __nptr ,
char * * __restrict __endptr , int __base )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __nonnull__ ( 1 ) ) );
__extension__
extern unsigned long long int strtoull ( const char *
   __restrict __nptr ,
char * * __restrict __endptr , int __base )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __nonnull__ ( 1 ) ) );
extern char * 164a ( long int _n ) _attribute_ ( (
   __nothrow__ , __leaf__ ) ) ;
extern long int a641 ( const char * __s )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __pure__ ) ) __attribute__ ( (
   _{-}nonnull_{-} (1));
typedef __u_char u_char ;
typedef __u_short u_short ;
```

```
typedef __u_long u_long ;
typedef __quad_t quad_t ;
typedef __u_quad_t u_quad_t ;
typedef __fsid_t fsid_t ;
typedef __loff_t loff_t ;
typedef __ino_t ino_t ;
typedef __dev_t dev_t ;
typedef __gid_t gid_t ;
typedef __mode_t mode_t ;
typedef __nlink_t nlink_t;
typedef __uid_t uid_t ;
typedef __off_t off_t;
typedef __pid_t pid_t ;
```

```
typedef __id_t id_t ;
typedef __ssize_t ssize_t ;
typedef __daddr_t daddr_t ;
typedef __caddr_t caddr_t ;
typedef __key_t key_t ;
typedef __clock_t clock_t ;
typedef __time_t time_t ;
typedef __clockid_t clockid_t :
typedef __timer_t timer_t ;
typedef unsigned long int ulong;
typedef unsigned short int ushort;
typedef unsigned int uint ;
typedef int int8_t __attribute__ ( ( __mode__ ( __QI__
   ) ) ) ;
```

```
typedef int int16_t __attribute__ ( ( __mode__ ( __HI__
    ) ) ) ;
typedef int int32_t __attribute__ ( ( __mode__ ( __SI__
    ) ) ) ;
typedef int int64_t __attribute__ ( ( __mode__ ( __DI__
    ) ) ) ;
typedef unsigned int u_int8_t __attribute__ ( (
   _{-mode_{--}}( _{--}QI_{--}) ) ) ;
typedef unsigned int u_int16_t __attribute__ ( (
   __mode__ ( __HI__ ) ) ;
typedef unsigned int u_int32_t __attribute__ ( (
   __mode__ ( __SI__ ) ) ) ;
typedef unsigned int u_int64_t __attribute__ ( (
   __mode__ ( __DI__ ) ) ) ;
typedef int register_t __attribute__ ( ( __mode__ (
   __word__ ) ) ) ;
typedef int __sig_atomic_t ;
typedef struct
                                              Analizador Sintáctico
```

```
typedef __sigset_t sigset_t ;
struct timespec
__time_t tv_sec ;
__syscall_slong_t tv_nsec ;
struct timeval
__time_t tv_sec :
__suseconds_t tv_usec :
typedef __suseconds_t suseconds_t ;
typedef long int __fd_mask ;
```

```
typedef struct
\_fd\_mask \_fds\_bits [ 1024 / ( 8 * ( int ) sizeof (
   __fd_mask ) ) ] ;
} fd_set :
typedef __fd_mask fd_mask ;
extern int select ( int __nfds , fd_set * __restrict
   __readfds .
fd_set * __restrict __writefds .
fd_set * __restrict __exceptfds ,
struct timeval * __restrict __timeout );
extern int pselect ( int __nfds , fd_set * __restrict
   __readfds ,
fd_set * __restrict __writefds ,
fd_set * __restrict __exceptfds ,
const struct timespec * __restrict __timeout ,
```

```
const __sigset_t * __restrict __sigmask );
extension
extern unsigned int gnu_dev_major ( unsigned long long
   int __dev )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __const__ ) ) ;
extension
extern unsigned int gnu_dev_minor ( unsigned long long
   int __dev )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __const__ ) ) ;
extension
extern unsigned long long int gnu_dev_makedev (
   unsigned int __major ,
unsigned int __minor )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __const__ ) ) ;
typedef __blksize_t blksize_t;
typedef __blkcnt_t blkcnt_t;
```

```
typedef __fsblkcnt_t fsblkcnt_t;
typedef __fsfilcnt_t fsfilcnt_t :
typedef unsigned long int pthread_t;
union pthread_attr_t
char __size [ 56 ] ;
long int __align ;
typedef union pthread_attr_t pthread_attr_t;
typedef struct __pthread_internal_list
struct __pthread_internal_list * __prev ;
struct __pthread_internal_list * __next ;
```

```
} __pthread_list_t ;
typedef union
struct __pthread_mutex_s
int __lock ;
unsigned int __count ;
int __owner ;
unsigned int __nusers ;
int __kind ;
short __spins ;
short __elision :
__pthread_list_t __list ;
```

```
} __data ;
char __size [ 40 ] ;
long int __align ;
} pthread_mutex_t ;
typedef union
char __size [ 4 ] ;
int __align ;
} pthread_mutexattr_t ;
typedef union
struct
```

```
int __lock :
unsigned int __futex ;
__extension__ unsigned long long int __total_seq ;
__extension__ unsigned long long int __wakeup_seq ;
__extension__ unsigned long long int __woken_seq ;
void * __mutex ;
unsigned int __nwaiters ;
unsigned int __broadcast_seq ;
} __data ;
char __size [ 48 ] ;
__extension__ long long int __align ;
} pthread_cond_t ;
typedef union
```

```
char __size [ 4 ] ;
int __align ;
} pthread_condattr_t ;
typedef unsigned int pthread_key_t ;
typedef int pthread_once_t ;
typedef union
struct
int __lock :
unsigned int __nr_readers ;
unsigned int __readers_wakeup ;
```

```
unsigned int __writer_wakeup ;
unsigned int __nr_readers_queued ;
unsigned int __nr_writers_queued ;
int __writer :
int __shared ;
signed char __rwelision ;
unsigned char __pad1 [ 7 ] ;
unsigned long int __pad2 ;
unsigned int __flags ;
} __data ;
char __size [ 56
static int keep_printing = 1 ;
static int read_file ( const char * , char * , int * )
```

```
void * keep_printing_maze ( void * ) ;
int main ( int argc , char const * argv [ ] )
int maze_size [2] = \{0, 0\};
char string [ 2048 ];
pthread_t manager , printing ;
if ( argc
unsigned int __w_retcode : 8 ;
unsigned int: 16;
} __wait_terminated ;
struct
```

```
unsigned int __w_stopval : 8 ;
unsigned int __w_stopsig : 8 ;
unsigned int: 16;
} __wait_stopped ;
typedef union
union wait * __uptr ;
int * __iptr ;
} __WAIT_STATUS __attribute__ ( ( __transparent_union__
typedef struct
int quot;
```

```
int rem ;
} div_t ;
typedef struct
long int quot;
long int rem ;
} ldiv_t ;
__extension__ typedef struct
long long int quot;
long long int rem;
} Ildiv_t ;
extern size_t __ctype_get_mb_cur_max ( void )
   __attribute__ ( ( __nothrow__ , __leaf__ ) ) ;
```

```
extern double atof ( const char * __nptr )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __pure__ ) ) __attribute__ ( (
   _{-}nonnull_{-} (1));
extern int atoi ( const char * __nptr )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __pure__ ) ) __attribute__ ( (
   _{-}nonnull_{-} (1));
extern long int atol ( const char * __nptr )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __pure__ ) ) __attribute__ ( (
   _{-}nonnull_{-} (1));
__extension__ extern long long int atoll ( const char *
    __nptr )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __pure__ ) ) __attribute__ ( (
   _{-}nonnull_{-} (1));
extern double strtod ( const char * __restrict __nptr ,
char * * __restrict __endptr )
```

```
extern long double strtold ( const char * __restrict
   __nptr ,
char * * __restrict __endptr )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __nonnull__ ( 1 ) ) );
extern long int strtol ( const char * __restrict __nptr
char * * __restrict __endptr , int __base )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __nonnull__ ( 1 ) ) );
extern unsigned long int strtoul ( const char *
   __restrict __nptr ,
char * * __restrict __endptr , int __base )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __nonnull__ ( 1 ) ) );
__extension__
extern long long int strtoq ( const char * __restrict
   __nptr ,
char * * __restrict __endptr , int __base )
```

```
__extension__
extern unsigned long long int strtoug ( const char *
   __restrict __nptr ,
char * * __restrict __endptr , int __base )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __nonnull__ ( 1 ) ) ) ;
extension
extern long long int strtoll ( const char * __restrict
   __nptr ,
char * * __restrict __endptr , int __base )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __nonnull__ ( 1 ) ) );
extension
extern unsigned long long int strtoull (const char *
   __restrict __nptr ,
char * * __restrict __endptr , int __base )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __nonnull__ ( 1 ) ) );
extern char * 164a ( long int _n ) _attribute_ ( (
```

```
extern long int a641 ( const char * __s )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __pure__ ) ) __attribute__ ( (
   _{-}nonnull_{-} (1));
typedef __u_char u_char ;
typedef __u_short u_short ;
typedef __u_int u_int ;
typedef __u_long u_long ;
typedef __quad_t quad_t ;
typedef __u_quad_t u_quad_t ;
typedef __fsid_t fsid_t :
typedef __loff_t loff_t;
typedef __ino_t ino_t ;
typedef __dev_t dev_t ;
typedef __gid_t gid_t ;
```

```
typedef __mode_t mode_t ;
typedef __nlink_t nlink_t;
typedef __uid_t uid_t ;
typedef __off_t off_t ;
typedef __pid_t pid_t ;
typedef __id_t id_t ;
typedef __ssize_t ssize_t ;
typedef __daddr_t daddr_t ;
typedef __caddr_t caddr_t ;
typedef __key_t key_t ;
typedef __clock_t clock_t ;
typedef __time_t time_t ;
typedef __clockid_t clockid_t ;
```

```
typedef __timer_t timer_t ;
typedef unsigned long int ulong;
typedef unsigned short int ushort;
typedef unsigned int uint ;
typedef int int8_t __attribute__ ( ( __mode__ ( __QI__
) ) ) ;
typedef int int16_t __attribute__ ( ( __mode__ ( __HI__
    ) ) ) ;
typedef int int32_t __attribute__ ( ( __mode__ ( __SI__
    ) ) ) ;
typedef int int64_t __attribute__ ( ( __mode__ ( __DI__
    ) ) ) ;
typedef unsigned int u_int8_t __attribute__ ( (
   _{-mode_{--}}( _{--}QI_{--}) ) ) ;
typedef unsigned int u_int16_t __attribute__ ( (
   __mode__ ( __HI__ ) ) ) ;
typedef unsigned int u_int32_t __attribute__ ( (
   _{-mode_{-}} ( _{-}SI_{-} ) ) ;
typedef unsigned int u_int64_t __attribute__ ( (
```

```
typedef int __sig_atomic_t ;
typedef struct
unsigned long int _{-}val [ ( 1024 / ( 8 * sizeof (
   unsigned long int ) ) ] ;
} __sigset_t ;
typedef __sigset_t sigset_t ;
struct timespec
__time_t tv_sec ;
__syscall_slong_t tv_nsec ;
struct timeval
```

```
__time_t tv_sec ;
__suseconds_t tv_usec :
typedef __suseconds_t suseconds_t ;
typedef long int __fd_mask ;
typedef struct
\_fd\_mask \_fds\_bits [ 1024 / ( 8 * ( int ) sizeof (
   __fd_mask ) ) ] ;
} fd_set :
typedef __fd_mask fd_mask ;
extern int select ( int __nfds , fd_set * __restrict
   __readfds .
fd_set * __restrict __writefds .
fd_set * __restrict __exceptfds ,
```

```
struct timeval * __restrict __timeout );
extern int pselect ( int __nfds , fd_set * __restrict
   __readfds .
fd_set * __restrict __writefds .
fd_set * __restrict __exceptfds ,
const struct timespec * __restrict __timeout ,
const __sigset_t * __restrict __sigmask ) ;
__extension__
extern unsigned int gnu_dev_major ( unsigned long long
 int __dev )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __const__ ) ) ;
__extension__
extern unsigned int gnu_dev_minor ( unsigned long long
   int __dev )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __const__ ) ) ;
__extension__
```

```
extern unsigned long long int gnu_dev_makedev (
   unsigned int __major ,
unsigned int __minor )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __const__ ) ) ;
typedef __blksize_t blksize_t ;
typedef __blkcnt_t blkcnt_t ;
typedef __fsblkcnt_t fsblkcnt_t ;
typedef __fsfilcnt_t fsfilcnt_t;
typedef unsigned long int pthread_t;
union pthread_attr_t
char __size [ 56 ] ;
long int __align ;
```

```
typedef union pthread_attr_t pthread_attr_t;
typedef struct __pthread_internal_list
struct __pthread_internal_list * __prev ;
struct __pthread_internal_list * __next ;
} __pthread_list_t ;
typedef union
struct __pthread_mutex_s
int __lock :
unsigned int __count ;
int __owner ;
```

```
unsigned int __nusers ;
int __kind ;
short __spins ;
short __elision ;
__pthread_list_t __list ;
} __data ;
char __size [ 40 ] ;
long int __align ;
} pthread_mutex_t ;
typedef union
char __size [ 4 ] ;
int __align ;
```

```
} pthread_mutexattr_t ;
typedef union
struct
int __lock :
unsigned int __futex ;
__extension__ unsigned long long int __total_seq ;
__extension__ unsigned long long int __wakeup_seq ;
__extension__ unsigned long long int __woken_seq ;
void * __mutex ;
unsigned int __nwaiters ;
unsigned int __broadcast_seq ;
```

```
} __data ;
char __size [ 48 ] ;
__extension__ long long int __align ;
} pthread_cond_t ;
typedef union
char __size [ 4 ] ;
int __align ;
} pthread_condattr_t ;
typedef unsigned int pthread_key_t ;
typedef int pthread_once_t ;
typedef union
```

```
struct
int __lock :
unsigned int __nr_readers ;
unsigned int __readers_wakeup ;
unsigned int __writer_wakeup ;
unsigned int __nr_readers_queued ;
unsigned int __nr_writers_queued ;
int __writer :
int __shared ;
signed char __rwelision ;
unsigned char __pad1 [ 7 ] ;
unsigned long int __pad2 ;
```

```
unsigned int __flags ;
} __data ;
char __size [ 56
static int keep_printing = 1 ;
static int read_file ( const char * , char * , int * )
void * keep_printing_maze ( void * ) ;
int main ( int argc , char const * argv [ ] )
int maze_size [2] = \{0, 0\};
char string [ 2048 ];
pthread_t manager, printing;
if (argc < 2)
```

```
printf ( "Ingrese un archivo con el cual trabajar.\n" )
return 1;
if ( ! read_file ( argv [ 1 ] , string , maze_size ) )
printf ("El archivo ingresado no se pudo abrir o no
   existe. Intentelo de nuevo.\n");
return 1 :
init_threads_list_mutex ( );
init_maze_mutex ( ) ;
create_maze ( string , maze_size [ 0 ] , maze_size [ 1
   1):
create_walker (-1,0,0,2);
pthread_create ( & printing , NULL , keep_printing_maze
    , NULL ) ;
```

```
pthread_create ( & manager , NULL , check_for_threads ,
    NULL ) ;
pthread_join ( manager , NULL ) ;
keep_printing = 0;
pthread_join ( printing , NULL ) ;
print_finished_walkers ( ) ;
destroy_maze_mutex ( ) ;
destroy_threads_list_mutex ( ) ;
delete_maze ( ) ;
delete_walkers ( ) ;
return 0 :
static int read_file ( const char * file_name , char *
   string , int * maze_size )
```

```
FILE * maze_file = fopen ( file_name , "r" ) ;
char buffer [ 256 ];
char * tok ;
char * subString ;
int i = 0:
if (! maze_file )
return 0:
fgets ( buffer , sizeof ( buffer ) , maze_file ) ;
tok = strtok ( buffer , " \n" ) ;
while (tok)
maze\_size [ i ++ ] = atoi (tok);
tok = strtok (NULL , " \n" ) ;
```

```
printf ( "0" );
while ( ! feof ( maze_file ) )
printf ("1");
fgets (buffer, 256, maze_file);
printf ( "2" ) ;
strncpy ( subString , buffer , maze_size [ 1 ] );
printf ( "3" ) ;
strcat ( string , subString ) ;
fclose ( maze_file );
return 1 :
```

```
void * keep_printing_maze ( void * _ )
while ( keep_printing )
print_maze ( ) ;
sleep ( 1 ) ;
return NULL :
typedef long unsigned int size_t ;
extern void * memcpy ( void * __restrict __dest , const
    void * __restrict __src ,
size_t __n ) __attribute__ ( ( __nothrow__ , __leaf__ )
    __attribute__ ( ( __nonnull__ ( 1 , 2 ) ) ;
```

```
extern void * memmove ( void * __dest , const void *
   __src , size_t __n )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __nonnull__ ( 1 , 2 ) ) );
extern void * memccpy ( void * __restrict __dest ,
   const void * __restrict __src ,
int __c , size_t __n )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __nonnull__ ( 1 , 2 ) ) );
extern void * memset ( void * _s , int _c , size_t
   __n ) __attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __nonnull__ ( 1 ) ) );
extern int memcmp ( const void * __s1 , const void *
   __s2 , size_t __n )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __pure__ ) ) __attribute__ ( (
   -nonnull_{--}(1,2));
extern void * memchr ( const void * __s , int __c ,
   size_t __n )
```

```
const char * __restrict __src , size_t __n )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __nonnull__ ( 1 , 2 ) ) );
extern char * strcat ( char * __restrict __dest , const
    char * __restrict __src )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __nonnull__ ( 1 , 2 ) ) );
extern char * strncat ( char * __restrict __dest ,
   const char * __restrict __src .
size_t __n ) __attribute__ ( ( __nothrow__ , __leaf__ )
    __attribute__ ( ( __nonnull__ ( 1 , 2 ) ) );
extern int strcmp ( const char * __s1 , const char *
   __s2 )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __pure__ ) ) __attribute__ ( (
   _{-}nonnull_{-} (1,2));
extern int strncmp ( const char * __s1 , const char *
   _{-s2} , size_t _{-n} )
_{-attribute_{--}} ( ( _{-nothrow_{--}} , _{-leaf_{--}} ) )
```

```
const char * __restrict __src , size_t __n )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __nonnull__ ( 2 ) ) );
typedef struct __locale_struct
struct __locale_data * __locales [ 13 ] ;
const unsigned short int * __ctype_b ;
const int * __ctype_tolower ;
const int * __ctype_toupper ;
const char * __names [ 13 ] ;
} * __locale_t ;
typedef __locale_t locale_t ;
extern int strcoll_l ( const char * __s1 , const char *
    __s2 , __locale_t __l )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __pure__ ) ) __attribute__ ( (
   _{-}nonnull_{-} (1,2,3));
```

```
extern size_t strxfrm_l ( char * __dest , const char *
   __src , size_t __n ,
__locale_t __l ) __attribute__ ( ( __nothrow__ ,
   __leaf__ ) ) __attribute__ ( ( __nonnull__ ( 2 , 4
 ) ) ) ;
extern char * strdup ( const char * __s )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __malloc__ ) ) __attribute__ ( (
   _{-}nonnull_{-} (1));
extern char * strndup ( const char * __string , size_t
   __n )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __malloc__ ) ) __attribute__ ( (
   _{-}nonnull_{-} (1));
extern char * strchr ( const char * __s , int __c )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __pure__ ) ) __attribute__ ( (
   _{-}nonnull_{-} (1));
extern char * strrchr ( const char * __s , int __c )
```

```
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __pure__ ) ) __attribute__ ( (
   _{-}nonnull_{-} (1,2));
extern char * strpbrk ( const char * __s , const char *
    __accept )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __pure__ ) ) __attribute__ ( (
   _{-}nonnull_{-} (1,2));
extern char * strstr ( const char * __haystack , const
  char * __needle )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __pure__ ) ) __attribute__ ( (
   -nonnull_{-}(1,2));
extern char * strtok ( char * __restrict __s , const
   char * __restrict __delim )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __nonnull__ ( 2 ) ) );
extern char * __strtok_r ( char * __restrict __s ,
const char * __restrict __delim ,
```

```
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __nonnull__ ( 2 , 3 ) ) );
extern size_t strlen ( const char * __s )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __pure__ ) ) __attribute__ ( (
   _{-}nonnull_{-} (1));
extern size_t strnlen ( const char * __string , size_t
   __maxlen )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __pure__ ) ) __attribute__ ( (
   _{-}nonnull_{-} (1));
extern char * strerror ( int __errnum ) __attribute__ (
    ( __nothrow__ , __leaf__ ) ) ;
extern int strerror_r ( int __errnum , char * __buf ,
   size_t __buflen ) __asm__ ( "" "__xpg_strerror_r" )
    __attribute__ ( ( __nothrow__ , __leaf__ ) )
__attribute__ ( ( __nonnull__ ( 2 ) ) );
extern char * strerror_l ( int __errnum , __locale_t
   __l ) __attribute__ ( ( __nothrow__ , __leaf__ ) )
```

```
extern int bcmp ( const void * __s1 , const void * __s2
    , size_t __n )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __pure__ ) ) __attribute__ ( (
   _{-}nonnull_{-} (1,2));
extern char * index ( const char * __s , int __c )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __pure__ ) ) __attribute__ ( (
   _{-}nonnull_{-} (1));
extern char * rindex ( const char * __s , int __c )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __pure__ ) ) __attribute__ ( (
   _{-}nonnull_{-} (1));
extern int ffs ( int __i ) __attribute__ ( (
   __nothrow__ , __leaf__ ) ) __attribute__ ( (
   __const__ ) ) ;
extern int strcasecmp ( const char * __s1 , const char
   * _{-s2})
_{-attribute_{--}} ( ( _{-nothrow_{--}} , _{-leaf_{--}} ) )
                                              Analizador Sintáctico
```

```
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __nonnull__ ( 1 , 2 ) ) );
extern char * strsignal ( int __sig ) __attribute__ ( (
    __nothrow__ , __leaf__ ) ) ;
extern char * __stpcpy ( char * __restrict __dest ,
   const char * __restrict __src )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __nonnull__ ( 1 , 2 ) ) );
extern char * stpcpy ( char * __restrict __dest , const
    char * __restrict __src )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __nonnull__ ( 1 , 2 ) ) );
extern char * __stpncpy ( char * __restrict __dest ,
const char * __restrict __src , size_t __n )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __nonnull__ ( 1 , 2 ) ) );
extern char * stpncpy ( char * __restrict __dest ,
const char * __restrict __src , size_t __n )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
```

```
typedef unsigned short int __u_short ;
typedef unsigned int __u_int ;
typedef unsigned long int __u_long ;
typedef signed char __int8_t ;
typedef unsigned char __uint8_t ;
typedef signed short int __int16_t;
typedef unsigned short int __uint16_t ;
typedef signed int __int32_t ;
typedef unsigned int __uint32_t ;
typedef signed long int __int64_t ;
typedef unsigned long int __uint64_t ;
typedef long int __quad_t ;
typedef unsigned long int __u_quad_t ;
```

```
typedef unsigned long int __dev_t ;
typedef unsigned int __uid_t ;
typedef unsigned int __gid_t ;
typedef unsigned long int __ino_t ;
typedef unsigned long int __ino64_t ;
typedef unsigned int __mode_t ;
typedef unsigned long int __nlink_t;
typedef long int __off_t ;
typedef long int __off64_t;
typedef int __pid_t ;
typedef struct { int __val [ 2 ] ; } __fsid_t ;
typedef long int __clock_t ;
typedef unsigned long int __rlim_t ;
```

```
typedef unsigned long int __rlim64_t;
typedef unsigned int __id_t ;
typedef long int __time_t ;
typedef unsigned int __useconds_t ;
typedef long int __suseconds_t ;
typedef int __daddr_t ;
typedef int __key_t ;
typedef int __clockid_t ;
typedef void * __timer_t ;
typedef long int __blksize_t ;
typedef long int __blkcnt_t ;
typedef long int __blkcnt64_t ;
typedef unsigned long int __fsblkcnt_t ;
```

```
typedef unsigned long int __fsblkcnt64_t;
typedef unsigned long int __fsfilcnt_t ;
typedef unsigned long int __fsfilcnt64_t ;
typedef long int __fsword_t ;
typedef long int __ssize_t ;
typedef long int __syscall_slong_t;
typedef unsigned long int __syscall_ulong_t;
typedef __off64_t __loff_t ;
typedef __quad_t * __qaddr_t ;
typedef char * __caddr_t ;
typedef long int __intptr_t ;
typedef unsigned int __socklen_t;
typedef __ssize_t ssize_t ;
```

```
typedef long unsigned int size_t;
typedef __gid_t gid_t ;
typedef __uid_t uid_t ;
typedef __off_t off_t ;
typedef __useconds_t useconds_t;
typedef __pid_t pid_t ;
typedef __intptr_t intptr_t ;
typedef __socklen_t socklen_t ;
extern int access ( const char * __name , int __type )
   __attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __nonnull__ ( 1 ) ) );
extern int faccessat ( int __fd , const char * __file ,
    int __type , int __flag )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __nonnull__ ( 2 ) ) );
extern __off_t | seek ( int __fd , __off_t __offset ,
   int __whence ) __attribute__ ( ( __nothrow__ ,
   __leaf__ ) ) ;
extern int close ( int __fd ) ;
```

```
extern ssize_t read ( int __fd , void * __buf , size_t
   __nbytes ) ;
extern ssize_t write ( int __fd , const void * __buf ,
   size_t __n ) ;
extern ssize_t pread ( int __fd , void * __buf , size_t
   __nbvtes .
__off_t __offset );
extern ssize_t pwrite ( int __fd , const void * __buf ,
    size_t __n .
__off_t __offset );
extern int pipe ( int __pipedes [ 2 ] ) __attribute__ (
    ( __nothrow__ , __leaf__ ) ) ;
extern unsigned int alarm (unsigned int __seconds)
   __attribute__ ( ( __nothrow__ , __leaf__ ) ) ;
extern unsigned int sleep (unsigned int __seconds );
extern __useconds_t ualarm ( __useconds_t __value ,
   __useconds_t __interval )
__attribute__ ( ( __nothrow__ , __leaf__ ) ) ;
extern int usleep ( __useconds_t __useconds ) ;
```

```
extern int chown ( const char * __file , __uid_t
   __owner , __gid_t __group )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __nonnull__ ( 1 ) ) );
extern int fchown ( int __fd , __uid_t __owner ,
   __gid_t __group ) __attribute__ ( ( __nothrow__ ,
   __leaf__ ) ) ;
extern int lchown ( const char * __file , __uid_t
   __owner , __gid_t __group )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __nonnull__ ( 1 ) ) );
extern int fchownat ( int __fd , const char * __file ,
   __uid_t __owner .
__gid_t __group , int __flag )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __nonnull__ ( 2 ) ) );
extern int chdir ( const char * __path ) __attribute__
   ( ( __nothrow__ , __leaf__ ) ) __attribute__ ( (
   __nonnull__ ( 1 ) ) ) ;
                                             Analizador Sintáctico
```

```
extern int dup ( int __fd ) __attribute__ ( (
   __nothrow__ , __leaf__ ) ) ;
extern int dup2 ( int __fd , int __fd2 ) __attribute__
   ( ( __nothrow__ , __leaf__ ) ) ;
extern char * * __environ :
extern int execve ( const char * __path , char * const
   __argv [ ] ,
char * const __envp [ ] ) __attribute__ ( ( __nothrow__
    , __leaf__ ) ) __attribute__ ( ( __nonnull__ ( 1 ,
    2)));
extern int fexecve ( int __fd , char * const __argv [ ]
    , char * const __envp [ ] )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __nonnull__ ( 2 ) ) );
extern int execv ( const char * __path , char * const
   __argv [ ] )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __nonnull__ ( 1 , 2 ) ) );
extern int execle ( const char * __path , const char *
```

```
extern int execvp ( const char * __file , char * const
   __argv [ ] )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __nonnull__ ( 1 , 2 ) ) );
extern int execlp ( const char * __file , const char *
   __arg , ... )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __nonnull__ ( 1 , 2 ) ) );
extern int nice ( int __inc ) __attribute__ ( (
   __nothrow__ , __leaf__ ) ) ;
extern void _exit ( int __status ) __attribute__ ( (
   __noreturn__ ) ) ;
enum
_PC_LINK_MAX .
PC MAX CANON .
_PC_MAX_INPUT ,
_PC_NAME_MAX .
_PC_PATH_MAX ,
```

```
_PC_PIPE_BUF ,
_PC_CHOWN_RESTRICTED .
_PC_NO_TRUNC .
_PC_VDISABLE .
_PC_SYNC_IO .
_PC_ASYNC_IO .
_PC_PRIO_IO .
_PC_SOCK_MAXBUF ,
_PC_FILESIZEBITS .
PC REC INCR XFER SIZE .
_PC_REC_MAX_XFER_SIZE .
_PC_REC_MIN_XFER_SIZE .
PC REC XFER ALIGN .
```

```
PC_ALLOC_SIZE_MIN ,
_PC_SYMLINK_MAX .
_PC_2_SYMLINKS
enum
_SC_ARG_MAX .
_SC_CHILD_MAX ,
_SC_CLK_TCK .
_SC_NGROUPS_MAX ,
_SC_OPEN_MAX .
_SC_STREAM_MAX ,
SC TZNAME MAX .
```

```
_SC_JOB_CONTROL .
_SC_SAVED_IDS .
_SC_REALTIME_SIGNALS .
_SC_PRIORITY_SCHEDULING .
_SC_TIMERS ,
_SC_ASYNCHRONOUS_IO ,
_SC_PRIORITIZED_IO .
_SC_SYNCHRONIZED_IO .
_SC_FSYNC .
SC MAPPED FILES .
_SC_MEMLOCK .
_SC_MEMLOCK_RANGE .
_SC_MEMORY_PROTECTION .
```

```
SC MESSAGE_PASSING .
_SC_SEMAPHORES .
_SC_SHARED_MEMORY_OBJECTS .
_SC_AIO_LISTIO_MAX .
SC AIO MAX .
SC AIO_PRIO_DELTA_MAX .
_SC_DELAYTIMER_MAX .
_SC_MQ_OPEN_MAX .
_SC_MQ_PRIO_MAX ,
_SC_VERSION .
_SC_PAGESIZE .
_SC_RTSIG_MAX .
SC SEM NSEMS MAX .
```

```
SC SEM_VALUE_MAX .
_SC_SIGQUEUE_MAX .
_SC_TIMER_MAX .
SC_BC_BASE_MAX ,
SC BC DIM MAX .
_SC_BC_SCALE_MAX .
_SC_BC_STRING_MAX .
_SC_COLL_WEIGHTS_MAX ,
_SC_EQUIV_CLASS_MAX .
SC EXPR NEST MAX .
_SC_LINE_MAX .
_SC_RE_DUP_MAX .
SC CHARCLASS NAME MAX .
```

```
SC_2_VERSION ,
_SC_2_C_BIND .
_SC_2_C_DEV ,
_SC_2_FORT_DEV ,
SC 2 FORT RUN .
_SC_2_SW_DEV .
_SC_2_LOCALEDEF .
_SC_PII ,
_SC_PII_XTI .
_SC_PII_SOCKET .
_SC_PII_INTERNET .
_SC_PII_OSI .
_SC_POLL .
```

```
_SC_SELECT .
_SC_UIO_MAXIOV .
_{SC\_IOV\_MAX} = _{SC\_UIO\_MAXIOV}.
_SC_PII_INTERNET_STREAM ,
SC PII INTERNET DGRAM .
_SC_PII_OSI_COTS .
_SC_PII_OSI_CLTS .
_SC_PII_OSI_M .
SC T_IOV_MAX .
_SC_THREADS .
_SC_THREAD_SAFE_FUNCTIONS .
_SC_GETGR_R_SIZE_MAX .
SC GETPW R SIZE MAX .
```

```
SC LOGIN_NAME_MAX .
_SC_TTY_NAME_MAX ,
_SC_THREAD_DESTRUCTOR_ITERATIONS .
_SC_THREAD_KEYS_MAX .
SC THREAD STACK MIN
_SC_THREAD_THREADS_MAX .
SC THREAD ATTR STACKADDR
SC_THREAD_ATTR_STACKSIZE
_SC_THREAD_PRIORITY_SCHEDULING .
SC THREAD PRIO INHERIT
_SC_THREAD_PRIO_PROTECT
SC_THREAD_PROCESS_SHARED .
SC NPROCESSORS CONF
```

```
_SC_NPROCESSORS_ONLN
_SC_PHYS_PAGES .
_SC_AVPHYS_PAGES .
_SC_ATEXIT_MAX .
SC PASS MAX .
_SC_XOPEN_VERSION .
_SC_XOPEN_XCU_VERSION .
_SC_XOPEN_UNIX .
_SC_XOPEN_CRYPT .
_SC_XOPEN_ENH_I18N ,
_SC_XOPEN_SHM .
SC_2_CHAR_TERM .
SC 2 C VERSION
```

```
_SC_2_UPE
_SC_XOPEN_XPG2 ,
_SC_XOPEN_XPG3 .
_SC_XOPEN_XPG4 ,
SC CHAR BIT .
_SC_CHAR_MAX ,
_SC_CHAR_MIN .
_SC_INT_MAX ,
_SC_INT_MIN .
_SC_LONG_BIT .
_SC_WORD_BIT .
SC_MB_LEN_MAX ,
_SC_NZERO .
```

```
_SC_SSIZE_MAX
_SC_SCHAR_MAX
_SC_SCHAR_MIN
_SC_SHRT_MAX ,
SC SHRT MIN .
_SC_UCHAR_MAX .
_SC_UINT_MAX .
_SC_ULONG_MAX .
_SC_USHRT_MAX
SC NL ARGMAX
_SC_NL_LANGMAX ,
_SC_NL_MSGMAX .
_SC_NL_NMAX ,
```

```
_SC_NL_SETMAX .
_SC_NL_TEXTMAX .
_SC_XBS5_ILP32_OFF32 .
_SC_XBS5_ILP32_OFFBIG .
SC XBS5 LP64 OFF64 .
_SC_XBS5_LPBIG_OFFBIG .
_SC_XOPEN_LEGACY .
_SC_XOPEN_REALTIME .
_SC_XOPEN_REALTIME_THREADS .
SC ADVISORY INFO .
_SC_BARRIERS .
_SC_BASE .
SC C LANG SUPPORT .
```

```
_SC_C_LANG_SUPPORT_R .
_SC_CLOCK_SELECTION .
_SC_CPUTIME ,
_SC_THREAD_CPUTIME .
_SC_DEVICE_IO .
_SC_DEVICE_SPECIFIC .
_SC_DEVICE_SPECIFIC_R .
_SC_FD_MGMT ,
_SC_FIFO .
_SC_PIPE ,
_SC_FILE_ATTRIBUTES .
_SC_FILE_LOCKING .
_SC_FILE_SYSTEM .
```

```
_SC_MONOTONIC_CLOCK .
_SC_MULTI_PROCESS .
_SC_SINGLE_PROCESS .
_SC_NETWORKING .
SC READER WRITER LOCKS .
_SC_SPIN_LOCKS .
_SC_REGEXP .
SC_REGEX_VERSION .
_SC_SHELL .
_SC_SIGNALS .
_SC_SPAWN
_SC_SPORADIC_SERVER .
SC THREAD SPORADIC SERVER
```

```
_SC_SYSTEM_DATABASE .
_SC_SYSTEM_DATABASE_R .
_SC_TIMEOUTS .
_SC_TYPED_MEMORY_OBJECTS .
SC USER GROUPS .
_SC_USER_GROUPS_R .
_SC_2_PBS .
SC_2_PBS_ACCOUNTING .
_SC_2_PBS_LOCATE .
_SC_2_PBS_MESSAGE .
_SC_2_PBS_TRACK .
_SC_SYMLOOP_MAX .
SC STREAMS .
```

```
_SC_2_PBS_CHECKPOINT
SC V6 ILP32 OFF32 .
_SC_V6_ILP32_OFFBIG .
_SC_V6_LP64_OFF64 .
SC V6 LPBIG OFFBIG .
_SC_HOST_NAME_MAX .
_SC_TRACE .
_SC_TRACE_EVENT_FILTER .
_SC_TRACE_INHERIT .
_SC_TRACE_LOG .
_SC_LEVEL1_ICACHE_SIZE .
_SC_LEVEL1_ICACHE_ASSOC .
SC LEVEL1 ICACHE LINESIZE .
```

```
_SC_LEVEL1_DCACHE_SIZE .
SC LEVEL1 DCACHE ASSOC .
_SC_LEVEL1_DCACHE_LINESIZE .
_SC_LEVEL2_CACHE_SIZE .
SC LEVEL2 CACHE ASSOC
SC LEVEL2_CACHE_LINESIZE .
_SC_LEVEL3_CACHE_SIZE .
SC_LEVEL3_CACHE_ASSOC .
_SC_LEVEL3_CACHE_LINESIZE .
SC LEVEL4 CACHE SIZE .
_SC_LEVEL4_CACHE_ASSOC .
SC LEVEL4 CACHE LINESIZE
SC IPV6 = SC LEVEL1 ICACHE SIZE + 50.
```

```
_SC_RAW_SOCKETS .
SC V7 ILP32 OFF32 .
_SC_V7_ILP32_OFFBIG .
_SC_V7_LP64_OFF64 .
SC V7 LPBIG OFFBIG .
_SC_SS_REPL_MAX .
_SC_TRACE_EVENT_NAME_MAX .
SC_TRACE_NAME_MAX .
_SC_TRACE_SYS_MAX .
SC TRACE USER EVENT MAX .
_SC_XOPEN_STREAMS .
_SC_THREAD_ROBUST_PRIO_INHERIT ,
SC THREAD ROBUST PRIO PROTECT
```

```
enum
_CS_PATH ,
CS V6 WIDTH RESTRICTED ENVS .
_CS_GNU_LIBC_VERSION .
_CS_GNU_LIBPTHREAD_VERSION .
_CS_V5_WIDTH_RESTRICTED_ENVS .
_CS_V7_WIDTH_RESTRICTED_ENVS
_{CS_{LFS_{CFLAGS}}} = 1000 .
_CS_LFS_LDFLAGS .
_CS_LFS_LIBS .
CS LFS LINTFLAGS .
```

```
CS LES64 CELAGS
CS LFS64 LDFLAGS .
_CS_LFS64_LIBS .
_CS_LFS64_LINTFLAGS .
CS XBS5 ILP32 OFF32 CFLAGS = 1100 .
_CS_XBS5_ILP32_OFF32_LDFLAGS .
_CS_XBS5_ILP32_OFF32_LIBS .
_CS_XBS5_ILP32_OFF32_LINTFLAGS .
_CS_XBS5_ILP32_OFFBIG_CFLAGS
CS XBS5 ILP32 OFFBIG LDFLAGS .
_CS_XBS5_ILP32_OFFBIG_LIBS .
CS XBS5 II P32 OFFBIG LINTFLAGS
CS XBS5 LP64 OFF64 CFLAGS .
```

```
CS XBS5_LP64_OFF64_LDFLAGS .
CS XBS5 LP64 OFF64 LIBS .
_CS_XBS5_LP64_OFF64_LINTFLAGS .
_CS_XBS5_LPBIG_OFFBIG_CFLAGS .
CS XBS5 LPBIG OFFBIG LDFLAGS .
_CS_XBS5_LPBIG_OFFBIG_LIBS .
CS XBS5 LPBIG OFFBIG LINTELAGS
_CS_POSIX_V6_ILP32_OFF32_CFLAGS
CS POSIX_V6_ILP32_OFF32_LDFLAGS .
CS POSIX V6 ILP32 OFF32 LIBS .
_CS_POSIX_V6_ILP32_OFF32_LINTFLAGS
_CS_POSIX_V6_ILP32_OFFBIG_CFLAGS
CS POSIX V6 ILP32 OFFBIG LDFLAGS
```

```
CS POSIX V6 II P32 OFFBIG LIBS
CS POSIX V6 ILP32 OFFBIG LINTFLAGS
_CS_POSIX_V6_LP64_OFF64_CFLAGS
_CS_POSIX_V6_LP64_OFF64_LDFLAGS .
CS POSIX V6 LP64 OFF64 LIBS
CS POSIX_V6_LP64_OFF64_LINTFLAGS .
CS POSIX V6 LPBIG OFFBIG CFLAGS
_CS_POSIX_V6_LPBIG_OFFBIG_LDFLAGS .
_CS_POSIX_V6_LPBIG_OFFBIG_LIBS
CS POSIX V6 LPBIG OFFBIG LINTFLAGS .
_CS_POSIX_V7_ILP32_OFF32_CFLAGS
_CS_POSIX_V7_ILP32_OFF32_LDFLAGS .
CS POSIX V7 ILP32 OFF32 LIBS
```

```
CS POSIX V7 II P32 OFF32 LINTELAGS
CS POSIX V7 ILP32 OFFBIG CFLAGS
_CS_POSIX_V7_ILP32_OFFBIG_LDFLAGS .
_CS_POSIX_V7_ILP32_OFFBIG_LIBS
_CS_POSIX_V7_ILP32_OFFBIG_LINTFLAGS .
_CS_POSIX_V7_LP64_OFF64_CFLAGS
_CS_POSIX_V7_LP64_OFF64_LDFLAGS .
_CS_POSIX_V7_LP64_OFF64_LIBS .
CS POSIX_V7_LP64_OFF64_LINTFLAGS
CS POSIX V7 LPBIG OFFBIG CFLAGS
_CS_POSIX_V7_LPBIG_OFFBIG_LDFLAGS .
_CS_POSIX_V7_LPBIG_OFFBIG_LIBS
CS POSIX V7 LPBIG OFFBIG LINTFLAGS
```

```
_CS_V6_ENV .
CS V7 FNV
extern long int pathconf ( const char * __path , int
   __name )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __nonnull__ ( 1 ) ) );
extern long int fpathconf ( int __fd , int __name )
   __attribute__ ( ( __nothrow__ , __leaf__ ) ) ;
extern long int sysconf ( int __name ) __attribute__ (
   ( __nothrow__ , __leaf__ ) ) ;
extern size_t confstr ( int __name , char * __buf ,
   size_t __len ) __attribute__ ( ( __nothrow__ ,
   __leaf__ ) ) ;
extern __pid_t getpid ( void ) __attribute__ ( (
   __nothrow__ , __leaf__ ) ) ;
extern __pid_t getppid ( void ) __attribute__ ( (
   __nothrow__ , __leaf__ ) ) ;
extern __pid_t getpgrp ( void ) __attribute__ ( (
```

```
extern int setpgid ( __pid_t __pid , __pid_t __pgid )
   __attribute__ ( ( __nothrow__ , __leaf__ ) ) ;
extern int setpgrp ( void ) __attribute__ ( (
   __nothrow__ , __leaf__ ) ) ;
extern __pid_t setsid ( void ) __attribute__ ( (
   __nothrow__ , __leaf__ ) ) ;
extern __pid_t getsid ( __pid_t __pid ) __attribute__ (
    ( __nothrow__ , __leaf__ ) ) ;
extern __uid_t getuid ( void ) __attribute__ ( (
   __nothrow__ , __leaf__ ) ) ;
extern __uid_t geteuid ( void ) __attribute__ ( (
   __nothrow__ , __leaf__ ) ) ;
extern __gid_t getgid ( void ) __attribute__ ( (
   __nothrow__ , __leaf__ ) ) ;
extern __gid_t getegid ( void ) __attribute__ ( (
   __nothrow__ , __leaf__ ) ) ;
extern int getgroups ( int __size , __gid_t __list [ ]
 ) __attribute__ ( ( __nothrow__ , __leaf__ ) ) ;
extern int setuid ( __uid_t __uid ) __attribute__ ( (
```

```
extern int setregid ( __gid_t __rgid , __gid_t __egid )
    __attribute__ ( ( __nothrow__ , __leaf__ ) ) ;
extern int setegid ( __gid_t __gid ) __attribute__ ( (
   __nothrow__ , __leaf__ ) ) ;
extern __pid_t fork ( void ) __attribute__ ( (
   __nothrow__ ) ) ;
extern __pid_t vfork ( void ) __attribute__ ( (
   __nothrow__ , __leaf__ ) ) ;
extern char * ttyname ( int __fd ) __attribute__ ( (
   __nothrow__ , __leaf__ ) ) ;
extern int ttyname_r ( int __fd , char * __buf , size_t
    __buflen )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __nonnull__ ( 2 ) ) );
extern int isatty ( int __fd ) __attribute__ ( (
   __nothrow__ , __leaf__ ) ) ;
extern int ttyslot ( void ) __attribute__ ( (
   __nothrow__ , __leaf__ ) ) ;
extern int link ( const char * __from , const char *
```

```
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __nonnull__ ( 2 , 4 ) ) );
extern int symlink ( const char * __from , const char *
    __to )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __nonnull__ ( 1 , 2 ) ) );
extern ssize_t readlink ( const char * __restrict
   __path ,
char * __restrict __buf , size_t __len )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __nonnull__ ( 1 , 2 ) ) );
extern int symlinkat ( const char * __from , int __tofd
const char * __to ) __attribute__ ( ( __nothrow__ ,
   __leaf__ ) ) __attribute__ ( ( __nonnull__ ( 1 , 3
   ) ) ) ;
extern ssize_t readlinkat ( int __fd , const char *
   __restrict __path ,
char * __restrict __buf , size_t __len )
```

```
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __nonnull__ ( 2 ) ) );
extern int rmdir ( const char * __path ) __attribute__
   ( ( __nothrow__ , __leaf__ ) ) __attribute__ ( (
   _{-}nonnull_{-} (1));
extern __pid_t tcgetpgrp ( int __fd ) __attribute__ ( (
    __nothrow__ , __leaf__ ) ) ;
extern int tcsetpgrp ( int __fd , __pid_t __pgrp_id )
   __attribute__ ( ( __nothrow__ , __leaf__ ) ) ;
extern char * getlogin ( void );
extern int getlogin_r ( char * __name , size_t
   __name_len ) __attribute__ ( ( __nonnull__ ( 1 ) )
extern int setlogin ( const char * __name )
   __attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __nonnull__ ( 1 ) ) );
extern char * optarg ;
extern int optind;
extern int opterr;
```

```
extern int gethostname ( char * _name , size_t __len )
    __attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __nonnull__ ( 1 ) ) );
extern int sethostname ( const char * __name , size_t
   __len )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __nonnull__ ( 1 ) ) );
extern int sethostid ( long int __id ) __attribute__ (
   ( __nothrow__ , __leaf__ ) ) ;
extern int getdomainname ( char * __name , size_t __len
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __nonnull__ ( 1 ) ) );
extern int setdomainname ( const char * __name , size_t
    __len )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __nonnull__ ( 1 ) ) );
extern int vhangup ( void ) __attribute__ ( (
   __nothrow__ , __leaf__ ) ) ;
```

```
extern int acct ( const char * __name ) __attribute__ (
    ( __nothrow__ , __leaf__ ) ) ;
extern char * getusershell ( void ) __attribute__ ( (
   __nothrow__ , __leaf__ ) ) ;
extern void endusershell ( void ) __attribute__ ( (
   __nothrow__ , __leaf__ ) ) ;
extern void setusershell ( void ) __attribute__ ( (
   __nothrow__ , __leaf__ ) ) ;
extern int daemon ( int __nochdir , int __noclose )
   __attribute__ ( ( __nothrow__ , __leaf__ ) ) ;
extern int chroot ( const char * __path ) __attribute__
    ( ( __nothrow__ , __leaf__ ) ) __attribute__ ( (
   _{-}nonnull_{-} (1));
extern char * getpass ( const char * __prompt )
   __attribute__ ( ( __nonnull__ ( 1 ) ) );
extern int fsync ( int __fd );
extern long int gethostid (void);
extern void sync ( void ) __attribute__ ( ( __nothrow__
    , __leaf__ ) ) ;
                                             Analizador Sintáctico
```

```
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __nonnull__ ( 1 ) ) );
extern int ftruncate ( int __fd , __off_t __length )
   __attribute__ ( ( __nothrow__ , __leaf__ ) ) ;
extern int brk ( void * __addr ) __attribute__ ( (
   __nothrow__ , __leaf__ ) ) ;
extern void * sbrk ( intptr_t __delta ) __attribute__ (
    ( __nothrow__ , __leaf__ ) ) ;
extern long int syscall (long int _sysno , ... )
   __attribute__ ( ( __nothrow__ , __leaf__ ) ) ;
extern int lockf ( int __fd , int __cmd , __off_t __len
extern int fdatasync ( int __fildes );
typedef long unsigned int size_t;
typedef int wchar_t;
typedef enum
P_ALL .
P_PID ,
```

```
P PGID
} idtype_t ;
typedef unsigned char __u_char ;
typedef unsigned short int __u_short;
typedef unsigned int __u_int ;
typedef unsigned long int __u_long ;
typedef signed char __int8_t ;
typedef unsigned char __uint8_t ;
typedef signed short int __int16_t ;
typedef unsigned short int __uint16_t ;
typedef signed int __int32_t ;
typedef unsigned int __uint32_t ;
typedef signed long int __int64_t ;
```

```
typedef unsigned long int __uint64_t ;
typedef long int __quad_t ;
typedef unsigned long int __u_quad_t ;
typedef unsigned long int __dev_t ;
typedef unsigned int __uid_t ;
typedef unsigned int __gid_t ;
typedef unsigned long int __ino_t ;
typedef unsigned long int __ino64_t ;
typedef unsigned int __mode_t ;
typedef unsigned long int __nlink_t;
typedef long int __off_t ;
typedef long int __off64_t ;
typedef int __pid_t ;
```

```
typedef struct { int __val [ 2 ] ; } __fsid_t ;
typedef long int __clock_t ;
typedef unsigned long int __rlim_t ;
typedef unsigned long int __rlim64_t;
typedef unsigned int __id_t ;
typedef long int __time_t ;
typedef unsigned int __useconds_t ;
typedef long int __suseconds_t ;
typedef int __daddr_t ;
typedef int __key_t ;
typedef int __clockid_t ;
typedef void * __timer_t ;
typedef long int __blksize_t ;
```

```
typedef long int __blkcnt_t ;
typedef long int __blkcnt64_t ;
typedef unsigned long int __fsblkcnt_t;
typedef unsigned long int __fsblkcnt64_t ;
typedef unsigned long int __fsfilcnt_t ;
typedef unsigned long int __fsfilcnt64_t ;
typedef long int __fsword_t ;
typedef long int __ssize_t ;
typedef long int __syscall_slong_t;
typedef unsigned long int __syscall_ulong_t ;
typedef __off64_t __loff_t :
typedef __quad_t * __qaddr_t ;
typedef char * __caddr_t ;
```

```
typedef long int __intptr_t ;
typedef unsigned int __socklen_t ;
static __inline unsigned int
__bswap_32 ( unsigned int __bsx )
return __builtin_bswap32 ( __bsx ) ;
static __inline __uint64_t
return __builtin_bswap64 ( __bsx ) ;
union wait
```

```
int w_status ;
struct
unsigned int __w_termsig : 7 ;
unsigned int __w_coredump : 1 ;
unsigned int __w_retcode : 8 ;
unsigned int: 16;
} __wait_terminated ;
struct
unsigned int __w_stopval : 8 ;
unsigned int __w_stopsig : 8 ;
```

```
unsigned int: 16;
} __wait_stopped ;
typedef union
union wait * __uptr ;
int * __iptr ;
} __WAIT_STATUS __attribute__ ( ( __transparent_union__
 ) ) ;
typedef struct
int quot;
int rem :
} div_t ;
```

```
typedef struct
long int quot;
long int rem;
} ldiv_t ;
__extension__ typedef struct
long long int quot;
long long int rem;
} Ildiv_t :
extern size_t __ctype_get_mb_cur_max ( void )
   __attribute__ ( ( __nothrow__ , __leaf__ ) ) ;
extern double atof ( const char * __nptr )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __pure__ ) ) __attribute__ ( (
   _{-}nonnull_{-} (1));
```

```
extern int atoi ( const char * __nptr )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __pure__ ) ) __attribute__ ( (
   _{-}nonnull_{-} (1));
extern long int atol ( const char * __nptr )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __pure__ ) ) __attribute__ ( (
   _{-}nonnull_{-} (1));
__extension__ extern long long int atoll ( const char *
    __nptr )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __pure__ ) ) __attribute__ ( (
   _{-}nonnull_{-} (1));
extern double strtod ( const char * __restrict __nptr ,
char * * __restrict __endptr )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __nonnull__ ( 1 ) ) );
extern float strtof ( const char * __restrict __nptr ,
char * * __restrict __endptr ) __attribute__ ( (
```

```
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __nonnull__ ( 1 ) ) );
extern long int strtol ( const char * __restrict __nptr
char * * __restrict __endptr , int __base )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __nonnull__ ( 1 ) ) );
extern unsigned long int strtoul ( const char *
   __restrict __nptr ,
char * * __restrict __endptr , int __base )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __nonnull__ ( 1 ) ) );
extension
extern long long int strtoq ( const char * __restrict
   __nptr ,
char * * __restrict __endptr , int __base )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __nonnull__ ( 1 ) ) );
__extension__
```

```
char * * __restrict __endptr , int __base )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __nonnull__ ( 1 ) ) );
__extension__
extern long long int strtoll ( const char * __restrict
   __nptr ,
char * * __restrict __endptr , int __base )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __nonnull__ ( 1 ) ) );
extension
extern unsigned long long int strtoull (const char *
   __restrict __nptr ,
char * * __restrict __endptr , int __base )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __nonnull__ ( 1 ) ) );
extern char * 164a ( long int __n ) __attribute__ ( (
   __nothrow__ , __leaf__ ) ) ;
extern long int a641 ( const char * __s )
\_attribute\_ ( ( \_nothrow\_ , \_leaf\_ ) )
                                             Analizador Sintáctico
```

```
typedef __u_char u_char ;
typedef __u_short u_short ;
typedef __u_int u_int ;
typedef __u_long u_long ;
typedef __quad_t quad_t ;
typedef __u_quad_t u_quad_t ;
typedef __fsid_t fsid_t :
typedef __loff_t loff_t ;
typedef __ino_t ino_t ;
typedef __dev_t dev_t ;
typedef __gid_t gid_t ;
typedef __mode_t mode_t ;
typedef __nlink_t nlink_t;
```

```
typedef __uid_t uid_t ;
typedef __off_t off_t ;
typedef __pid_t pid_t ;
typedef __id_t id_t ;
typedef __ssize_t ssize_t ;
typedef __daddr_t daddr_t ;
typedef __caddr_t caddr_t ;
typedef __key_t key_t ;
typedef __clock_t clock_t;
typedef __time_t time_t ;
typedef __clockid_t clockid_t ;
typedef __timer_t timer_t ;
typedef unsigned long int ulong;
```

```
typedef unsigned short int ushort;
typedef unsigned int uint ;
typedef int int8_t __attribute__ ( ( __mode__ ( __QI__
 ) ) ) ;
typedef int int16_t __attribute__ ( ( __mode__ ( __HI__
    ) ) ) ;
typedef int int32_t __attribute__ ( ( __mode__ ( __SI__
    ) ) ) ;
typedef int int64_t __attribute__ ( ( __mode__ ( __DI__
    ) ) ) ;
typedef unsigned int u_int8_t __attribute__ ( (
   _{-mode_{-}}( _{-QI_{-}}) ) ) ;
typedef unsigned int u_int16_t __attribute__ ( (
   __mode__ ( __HI__ ) ) ) ;
typedef unsigned int u_int32_t __attribute__ ( (
   __mode__ ( __SI__ ) ) ) ;
typedef unsigned int u_int64_t __attribute__ ( (
   __mode__ ( __DI__ ) ) ) ;
typedef int register_t __attribute__ ( ( __mode__ (
```

```
unsigned long int __val [ ( 1024 / ( 8 * sizeof (
   unsigned long int ) ) ] ;
} __sigset_t ;
typedef __sigset_t sigset_t;
struct timespec
__time_t tv_sec ;
__syscall_slong_t tv_nsec ;
struct timeval
__time_t tv_sec ;
__suseconds_t tv_usec :
```

```
typedef __suseconds_t suseconds_t ;
typedef long int __fd_mask ;
typedef struct
\_fd\_mask \_fds\_bits [ 1024 / ( 8 * ( int ) sizeof (
  __fd_mask ) ) ] ;
} fd_set :
typedef __fd_mask fd_mask ;
extern int select ( int __nfds , fd_set * __restrict
   __readfds .
fd_set * __restrict __writefds ,
fd_set * __restrict __exceptfds ,
struct timeval * __restrict __timeout );
extern int pselect ( int __nfds , fd_set * __restrict
   __readfds .
```

```
fd_set * __restrict __writefds .
fd_set * __restrict __exceptfds .
const struct timespec * __restrict __timeout ,
const __sigset_t * __restrict __sigmask );
__extension__
extern unsigned int gnu_dev_major ( unsigned long long
   int __dev )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __const__ ) ) ;
__extension__
extern unsigned int gnu_dev_minor ( unsigned long long
 int __dev )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __const__ ) ) ;
extension
extern unsigned long long int gnu_dev_makedev (
   unsigned int __major ,
unsigned int __minor )
```

```
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __const__ ) ) ;
typedef __blksize_t blksize_t;
typedef __blkcnt_t blkcnt_t ;
typedef __fsblkcnt_t fsblkcnt_t ;
typedef __fsfilcnt_t fsfilcnt_t;
typedef unsigned long int pthread_t;
union pthread_attr_t
char __size [ 56 ] ;
long int __align ;
typedef union pthread_attr_t pthread_attr_t;
typedef struct __pthread_internal_list
```

```
struct __pthread_internal_list * __prev ;
struct __pthread_internal_list * __next ;
} __pthread_list_t ;
typedef union
struct __pthread_mutex_s
int __lock :
unsigned int __count ;
int __owner :
unsigned int __nusers ;
int __kind ;
```

```
short __spins ;
short __elision ;
__pthread_list_t __list ;
} __data ;
char __size [ 40 ] ;
long int __align ;
} pthread_mutex_t ;
typedef union
char __size [ 4 ] ;
int __align ;
} pthread_mutexattr_t ;
typedef union
```

```
struct
int __lock :
unsigned int __futex ;
__extension__ unsigned long long int __total_seq ;
__extension__ unsigned long long int __wakeup_seq ;
__extension__ unsigned long long int __woken_seq ;
void * __mutex :
unsigned int __nwaiters ;
unsigned int __broadcast_seq ;
} __data :
char __size [ 48 ] ;
```

```
_extension__ long long int __align ;
 pthread_cond_t ;
typedef union
char __size [ 4 ] ;
int __align ;
} pthread_condattr_t ;
typedef unsigned int pthread_key_t ;
typedef int pthread_once_t ;
typedef union
struct
```

```
int __lock :
unsigned int __nr_readers ;
unsigned int __readers_wakeup ;
unsigned int __writer_wakeup ;
unsigned int __nr_readers_queued ;
unsigned int __nr_writers_queued ;
int __writer :
int __shared :
signed char __rwelision ;
unsigned char __pad1 [ 7 ] ;
unsigned long int __pad2 ;
unsigned int __flags ;
} __data :
```

```
char __size [ 56 ] ;
long int __align ;
} pthread_rwlock_t ;
typedef union
char __size [ 8 ] ;
long int __align ;
} pthread_rwlockattr_t ;
typedef volatile int pthread_spinlock_t;
typedef union
char __size [ 32 ] ;
long int __align ;
```

```
} pthread_barrier_t ;
typedef union
char __size [ 4 ] ;
int __align ;
} pthread_barrierattr_t ;
extern long int random ( void ) __attribute__ ( (
   __nothrow__ , __leaf__ ) ) ;
extern void srandom ( unsigned int __seed )
   __attribute__ ( ( __nothrow__ , __leaf__ ) ) ;
extern char * initstate ( unsigned int __seed , char *
   __statebuf .
size_t __statelen ) __attribute__ ( ( __nothrow__ ,
   __leaf__ ) ) __attribute__ ( ( __nonnull__ ( 2 ) )
extern char * setstate ( char * __statebuf )
   __attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __nonnull__ ( 1 ) ) );
struct random_data
```

```
int32_t * fptr ;
int32_t * rptr;
int32_t * state :
int rand_type ;
int rand_deg ;
int rand_sep ;
int32_t * end_ptr ;
} :
extern int random_r ( struct random_data * __restrict
   __buf ,
int32_t * __restrict __result ) __attribute__ ( (
   __nothrow__ , __leaf__ ) ) __attribute__ ( (
   -nonnull_{-}(1,2));
extern int srandom_r ( unsigned int __seed , struct
   random_data * __buf )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __nonnull__ ( 2 ) ) );
extern int initstate_r ( unsigned int __seed , char *
   __restrict __statebuf .
```

```
size_t __statelen .
struct random_data * __restrict __buf )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __nonnull__ ( 2 , 4 ) ) );
extern int setstate_r ( char * __restrict __statebuf ,
struct random_data * __restrict __buf )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __nonnull__ ( 1 , 2 ) ) );
extern int rand ( void ) __attribute__ ( ( __nothrow__
   , __leaf__ ) ) ;
extern void srand ( unsigned int _seed ) __attribute__
    ( ( __nothrow__ , __leaf__ ) ) ;
extern int rand_r ( unsigned int * __seed )
   __attribute__ ( ( __nothrow__ , __leaf__ ) ) ;
extern double drand48 ( void ) __attribute__ ( (
   __nothrow__ , __leaf__ ) ) ;
extern double erand48 ( unsigned short int __xsubi [ 3
   ] ) __attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __nonnull__ ( 1 ) ) );
                                             Analizador Sintáctico
```

```
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __nonnull__ ( 1 ) ) );
extern long int mrand48 ( void ) __attribute__ ( (
   __nothrow__ , __leaf__ ) ) ;
extern long int jrand48 (unsigned short int __xsubi [
   3 1 )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __nonnull__ ( 1 ) ) );
extern void srand48 ( long int __seedval )
   __attribute__ ( ( __nothrow__ , __leaf__ ) ) ;
extern unsigned short int * seed48 ( unsigned short int
    __seed16v [ 3 ] )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __nonnull__ ( 1 ) ) );
extern void Icong48 (unsigned short int _param [7]
   ) __attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __nonnull__ ( 1 ) ) );
struct drand48_data
```

```
unsigned short int __init ;
__extension__ unsigned long long int __a ;
extern int drand48_r ( struct drand48_data * __restrict
    __buffer .
double * __restrict __result ) __attribute__ ( (
   __nothrow__ , __leaf__ ) ) __attribute__ ( (
   _{-}nonnull_{-} (1,2));
extern int erand48_r ( unsigned short int __xsubi [ 3 ]
struct drand48_data * __restrict __buffer .
double * __restrict __result ) __attribute__ ( (
   __nothrow__ , __leaf__ ) ) __attribute__ ( (
   _{-}nonnull_{-} (1,2));
extern int lrand48_r ( struct drand48_data * __restrict
    __buffer .
long int * __restrict __result )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   _{-attribute} ( ( _{-nonnull} ( 1 , 2 ) ) ;
```

```
long int * __restrict __result )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __nonnull__ ( 1 , 2 ) ) );
extern int mrand48_r ( struct drand48_data * __restrict
    __buffer .
long int * __restrict __result )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __nonnull__ ( 1 , 2 ) ) );
extern int jrand48_r ( unsigned short int __xsubi [ 3 ]
struct drand48_data * __restrict __buffer ,
long int * __restrict __result )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __nonnull__ ( 1 , 2 ) ) );
extern int srand48_r (long int __seedval , struct
   drand48_data * __buffer )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __nonnull__ ( 2 ) ) );
extern int seed48_r ( unsigned short int __seed16v [ 3
```

```
extern int lcong48_r (unsigned short int __param [ 7 ]
struct drand48_data * __buffer )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __nonnull__ ( 1 , 2 ) ) );
extern void * malloc ( size_t __size ) __attribute__ (
   ( __nothrow__ , __leaf__ ) ) __attribute__ ( (
   __malloc__ ) ) ;
extern void * calloc ( size_t __nmemb , size_t __size )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __malloc__ ) );
extern void * realloc ( void * __ptr , size_t __size )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __warn_unused_result__ ) );
extern void free ( void * __ptr ) __attribute__ ( (
   __nothrow__ , __leaf__ ) ) ;
extern void cfree ( void * __ptr ) __attribute__ ( (
   __nothrow__ , __leaf__ ) ) ;
extern void * alloca ( size_t __size ) __attribute__ (
```

```
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __nonnull__ ( 1 ) ) );
extern void * aligned_alloc ( size_t __alignment ,
   size_t __size )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __malloc__ ) ) __attribute__ ( (
   __alloc_size__ ( 2 ) ) );
extern void abort ( void ) __attribute__ ( (
   __nothrow__ , __leaf__ ) ) __attribute__ ( (
   __noreturn__ ) ) ;
extern int atexit ( void ( * __func ) ( void ) )
   __attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __nonnull__ ( 1 ) ) );
extern int at_quick_exit ( void ( * __func ) ( void ) )
    __attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __nonnull__ ( 1 ) ) );
extern int on_exit ( void ( * __func ) ( int __status ,
    void * __arg ) , void * __arg )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
```

```
extern int setenv ( const char * __name , const char *
   __value , int __replace )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __nonnull__ ( 2 ) ) );
extern int unsetenv ( const char * __name )
   __attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __nonnull__ ( 1 ) ) );
extern int clearenv ( void ) __attribute__ ( (
   __nothrow__ , __leaf__ ) ) ;
extern char * mktemp ( char * __template )
   __attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __nonnull__ ( 1 ) ) );
extern int mkstemp ( char * __template ) __attribute__
   ((_{-nonnull_{-}}(1)));
extern int mkstemps ( char * __template , int
   __suffixlen ) __attribute__ ( ( __nonnull__ ( 1 ) )
extern char * mkdtemp ( char * __template )
   __attribute__ ( ( __nothrow__ , __leaf__ ) )
```

```
size_t __nmemb , size_t __size , __compar_fn_t __compar
__attribute__ ( ( __nonnull__ ( 1 , 2 , 5 ) ) ) ;
extern void qsort ( void * __base , size_t __nmemb ,
   size_t __size .
__compar_fn_t __compar ) __attribute__ ( ( __nonnull__
   (1,4));
extern int abs ( int __x ) __attribute__ ( (
   __nothrow__ , __leaf__ ) ) __attribute__ ( (
   __const__ ) ) ;
extern long int labs (long int _x ) _attribute_ ( (
    __nothrow__ , __leaf__ ) ) __attribute__ ( (
   __const__ ) ) ;
__extension__ extern long long int llabs ( long long
   int __x )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __const__ ) ) ;
extern div_t div ( int __numer , int __denom )
_{-attribute_{--}} ( ( _{-nothrow_{--}} , _{-leaf_{--}} ) )
```

```
long long int __denom )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __const__ ) ) ;
extern char * ecvt ( double __value , int __ndigit ,
   int * __restrict __decpt ,
int * __restrict __sign ) __attribute__ ( ( __nothrow__
    , __leaf__ ) ) __attribute__ ( ( __nonnull__ ( 3 ,
    4 ) ) ) ;
extern char * fcvt ( double __value , int __ndigit ,
   int * __restrict __decpt ,
int * __restrict __sign ) __attribute__ ( ( __nothrow__
    , __leaf__ ) ) __attribute__ ( ( __nonnull__ ( 3 ,
    4 ) ) ) :
extern char * gcvt ( double __value , int __ndigit ,
   char * __buf )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __nonnull__ ( 3 ) ) );
extern char * qecvt ( long double __value , int
   __ndigit
```

```
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __nonnull__ ( 3 , 4 ) ) );
extern char * qgcvt ( long double __value , int
   __ndigit , char * __buf )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __nonnull__ ( 3 ) ) );
extern int ecvt_r ( double __value , int __ndigit , int
   * __restrict __decpt .
int * __restrict __sign , char * __restrict __buf ,
size_t __len ) __attribute__ ( ( __nothrow__ , __leaf__
   extern int fcvt_r ( double __value , int __ndigit , int
   * __restrict __decpt ,
int * __restrict __sign , char * __restrict __buf ,
size_t __len ) __attribute__ ( ( __nothrow__ , __leaf__
   extern int qecvt_r ( long double __value , int __ndigit
```

```
extern int qfcvt_r ( long double __value , int __ndigit
int * __restrict __decpt , int * __restrict __sign ,
char * __restrict __buf , size_t __len )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __nonnull__ ( 3 , 4 , 5 ) ) );
extern int mblen ( const char * _s , size_t _n )
   __attribute__ ( ( __nothrow__ , __leaf__ ) ) ;
extern int mbtowc ( wchar_t * __restrict __pwc ,
const char * __restrict __s , size_t __n )
   __attribute__ ( ( __nothrow__ , __leaf__ ) ) ;
extern int wctomb ( char * __s , wchar_t __wchar )
   __attribute__ ( ( __nothrow__ , __leaf__ ) ) ;
extern size_t mbstowcs ( wchar_t * __restrict __pwcs ,
const char * __restrict __s , size_t __n )
   __attribute__ ( ( __nothrow__ , __leaf__ ) ) ;
extern size_t wcstombs ( char * __restrict __s ,
const wchar_t * __restrict __pwcs , size_t __n )
__attribute__ ( ( __nothrow__ , __leaf__ ) ) ;
```

```
extern int rpmatch ( const char * __response )
   __attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __nonnull__ ( 1 ) ) );
extern int getsubopt ( char * * __restrict __optionp ,
char * const * __restrict __tokens .
char * * __restrict __valuep )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __nonnull__ ( 1 , 2 , 3 ) ) );
extern int getloadavg ( double __loadavg [ ] , int
   __nelem )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __nonnull__ ( 1 ) ) );
typedef long unsigned int size_t;
typedef unsigned char __u_char ;
typedef unsigned short int __u_short ;
typedef unsigned int __u_int ;
typedef unsigned long int __u_long ;
typedef signed char __int8_t ;
```

```
typedef unsigned char __uint8_t ;
typedef signed short int __int16_t ;
typedef unsigned short int __uint16_t ;
typedef signed int __int32_t ;
typedef unsigned int __uint32_t ;
typedef signed long int __int64_t ;
typedef unsigned long int __uint64_t ;
typedef long int __quad_t ;
typedef unsigned long int __u_quad_t ;
typedef unsigned long int __dev_t ;
typedef unsigned int __uid_t ;
typedef unsigned int __gid_t ;
typedef unsigned long int __ino_t ;
```

```
typedef unsigned long int __ino64_t ;
typedef unsigned int __mode_t ;
typedef unsigned long int __nlink_t ;
typedef long int __off_t ;
typedef long int __off64_t ;
typedef int __pid_t ;
typedef struct { int __val [ 2 ] ; } __fsid_t ;
typedef long int __clock_t ;
typedef unsigned long int __rlim_t ;
typedef unsigned long int __rlim64_t ;
typedef unsigned int __id_t ;
typedef long int __time_t ;
typedef unsigned int __useconds_t ;
```

```
typedef long int __suseconds_t ;
typedef int __daddr_t :
typedef int __key_t ;
typedef int __clockid_t ;
typedef void * __timer_t ;
typedef long int __blksize_t ;
typedef long int __blkcnt_t ;
typedef long int __blkcnt64_t ;
typedef unsigned long int __fsblkcnt_t;
typedef unsigned long int __fsblkcnt64_t ;
typedef unsigned long int __fsfilcnt_t ;
typedef unsigned long int __fsfilcnt64_t;
typedef long int __fsword_t ;
```

```
typedef long int __ssize_t ;
typedef long int __syscall_slong_t;
typedef unsigned long int __syscall_ulong_t ;
typedef __off64_t __loff_t;
typedef __quad_t * __qaddr_t ;
typedef char * __caddr_t ;
typedef long int __intptr_t ;
typedef unsigned int __socklen_t ;
struct _IO_FILE :
typedef struct _IO_FILE FILE ;
typedef struct _IO_FILE __FILE ;
typedef struct
```

```
int __count :
union
unsigned int _wch ;
char __wchb [ 4 ] ;
} __value ;
} __mbstate_t ;
typedef struct
__off_t __pos ;
__mbstate_t __state ;
} _G_fpos_t ;
typedef struct
```

```
__off64_t __pos ;
__mbstate_t __state ;
} _G_fpos64_t ;
typedef __builtin_va_list __gnuc_va_list ;
struct _IO_jump_t ; struct _IO_FILE ;
typedef void _IO_lock_t ;
struct _IO_marker {
struct _IO_marker * _next :
struct _IO_FILE * _sbuf ;
int _pos ;
enum codecvt result
```

```
__codecvt_ok .
__codecvt_partial ,
__codecvt_error ,
__codecvt_noconv
struct _IO_FILE {
int _flags ;
char * _IO_read_ptr ;
char * _IO_read_end ;
char * _IO_read_base ;
char * _IO_write_base :
char * _IO_write_ptr ;
```

```
char * _IO_write_end :
char * _IO_buf_base ;
char * _IO_buf_end ;
char * _IO_save_base :
char * _IO_backup_base ;
char * _IO_save_end ;
struct _IO_marker * _markers :
struct _IO_FILE * _chain :
int _fileno :
int _flags2 ;
__off_t _old_offset :
unsigned short _cur_column ;
signed char _vtable_offset ;
```

```
char _shortbuf [ 1 ] ;
_{10}lock_{t} * _{lock}:
__off64_t _offset ;
void * _-pad1 ;
void * _-pad2 ;
void * \_\_pad3 :
void * _-pad4 ;
size_t __pad5 ;
int _mode :
char \_unused2 [ 15 * sizeof ( int ) - 4 * sizeof ( void
    * ) - sizeof ( size_t ) ];
typedef struct _IO_FILE _IO_FILE ;
struct _IO_FILE_plus ;
```

```
extern struct _IO_FILE_plus _IO_2_1_stdin_ ;
extern struct _IO_FILE_plus _IO_2_1_stdout_ ;
extern struct _IO_FILE_plus _IO_2_1_stderr_ ;
typedef __ssize_t __io_read_fn ( void * __cookie , char
    * __buf , size_t __nbytes ) ;
typedef __ssize_t __io_write_fn ( void * __cookie ,
 const char * __buf .
size_t __n ) ;
typedef int __io_seek_fn ( void * __cookie , __off64_t
   * __pos , int __w ) ;
typedef int __io_close_fn ( void * __cookie ) ;
extern int __underflow ( _IO_FILE * ) ;
extern int __uflow ( _IO_FILE * ) ;
extern int __overflow ( _IO_FILE * , int ) ;
extern int _IO_getc ( _IO_FILE * __fp );
extern int _IO_putc ( int __c , _IO_FILE * __fp ) ;
```

```
extern int _IO_feof ( _IO_FILE * __fp ) __attribute__ (
    ( __nothrow__ , __leaf__ ) ) ;
extern int _IO_ferror ( _IO_FILE * __fp ) __attribute__
    ( ( __nothrow__ , __leaf__ ) ) ;
extern int _IO_peekc_locked ( _IO_FILE * __fp ) ;
extern void _IO_flockfile ( _IO_FILE * ) __attribute__
   ( ( __nothrow__ , __leaf__ ) ) ;
extern void _IO_funlockfile ( _IO_FILE * )
   __attribute__ ( ( __nothrow__ , __leaf__ ) ) ;
extern int _IO_ftrylockfile ( _IO_FILE * )
   __attribute__ ( ( __nothrow__ , __leaf__ ) ) ;
extern int _IO_vfscanf ( _IO_FILE * __restrict , const
   char * __restrict ,
__gnuc_va_list , int * __restrict ) ;
extern int _IO_vfprintf ( _IO_FILE * __restrict , const
    char * __restrict .
__gnuc_va_list ) ;
extern __ssize_t _IO_padn ( _IO_FILE * , int ,
   __ssize_t ) ;
```

```
extern __off64_t _IO_seekpos ( _IO_FILE * , __off64_t ,
    int ) ;
extern void _IO_free_backup_area ( _IO_FILE * )
   __attribute__ ( ( __nothrow__ , __leaf__ ) ) ;
typedef __gnuc_va_list va_list ;
typedef __off_t off_t :
typedef __ssize_t ssize_t ;
typedef _G_fpos_t fpos_t;
extern struct _IO_FILE * stdin ;
extern struct _IO_FILE * stdout :
extern struct _IO_FILE * stderr ;
extern int remove ( const char * __filename )
   __attribute__ ( ( __nothrow__ , __leaf__ ) ) ;
extern int rename ( const char * __old , const char *
   __new ) __attribute__ ( ( __nothrow__ , __leaf__ )
extern int renameat ( int __oldfd , const char * __old
   , int __newfd ,
const char * __new ) __attribute__ ( ( __nothrow__ ,
```

```
extern FILE * tmpfile ( void ) ;
extern char * tmpnam ( char * __s ) __attribute__ ( (
   __nothrow__ , __leaf__ ) ) ;
extern char * tmpnam_r ( char * __s ) __attribute__ ( (
    __nothrow__ , __leaf__ ) ) ;
extern char * tempnam ( const char * __dir , const char
    * __pfx )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
   __attribute__ ( ( __malloc__ ) );
extern int fclose ( FILE * __stream ) ;
extern int fflush ( FILE * __stream ) ;
extern int fflush_unlocked ( FILE * __stream ) ;
extern FILE * fopen ( const char * __restrict
   __filename .
const char * __restrict __modes ) ;
extern FILE * freopen ( const char * __restrict
   __filename ,
const char * __restrict __modes ,
FILE * __restrict __stream ) ;
```

```
extern FILE * fdopen ( int __fd , const char * __modes
   ) __attribute__ ( ( __nothrow__ , __leaf__ ) ) ;
extern FILE * fmemopen ( void * _s , size_t _len ,
   const char * __modes )
__attribute__ ( ( __nothrow__ , __leaf__ ) ) ;
extern FILE * open_memstream ( char * * __bufloc ,
   size_t * __sizeloc ) __attribute__ ( ( __nothrow__
   , __leaf__ ) ) ;
extern void setbuf ( FILE * __restrict __stream , char
   * __restrict __buf ) __attribute__ ( ( __nothrow__
   , __leaf__ ) ) ;
extern int setvbuf ( FILE * __restrict __stream , char
   * __restrict __buf ,
int __modes , size_t __n ) __attribute__ ( (
   __nothrow__ , __leaf__ ) ) ;
extern void setbuffer ( FILE * __restrict __stream ,
   char * __restrict __buf ,
size_t __size ) __attribute__ ( ( __nothrow__ ,
   __leaf__ ) ) ;
                                             Analizador Sintáctico
```

```
extern int sprintf ( char * __restrict __s ,
const char * __restrict __format , ... ) __attribute__
   ( ( __nothrow__ ) );
extern int vfprintf ( FILE * __restrict __s , const
   char * __restrict __format ,
__gnuc_va_list __arg ) ;
extern int vprintf ( const char * __restrict __format ,
    __gnuc_va_list __arg ) ;
extern int vsprintf ( char * __restrict __s , const
   char * __restrict __format ,
__gnuc_va_list __arg ) __attribute__ ( ( __nothrow__ )
 ) :
extern int snprintf ( char * __restrict __s , size_t
   __maxlen ,
const char * __restrict __format , ... )
__attribute__ ( ( __nothrow__ ) ) __attribute__ ( (
   __format__ ( __printf__ , 3 , 4 ) ) ;
extern int vsnprintf ( char * __restrict __s , size_t
   __maxlen ,
```

```
extern int vdprintf ( int __fd , const char *
   __restrict __fmt ,
__gnuc_va_list __arg )
__attribute__ ( ( __format__ ( __printf__ , 2 , 0 ) ) )
extern int dprintf ( int __fd , const char * __restrict
    __fmt , ... )
__attribute__ ( ( __format__ ( __printf__ , 2 , 3 ) ) )
extern int fscanf ( FILE * __restrict __stream ,
const char * __restrict __format , ... ) ;
extern int scanf ( const char * __restrict __format ,
   ...);
extern int sscanf ( const char * __restrict __s ,
const char * __restrict __format , ... ) __attribute__
   ( ( __nothrow__ , __leaf__ ) ) ;
extern int fscanf ( FILE * __restrict __stream , const
   char * __restrict __format , ... ) __asm__ (
   __isoc99_fscanf" )
```

```
extern int sscanf ( const char * __restrict __s , const
    char * __restrict __format , ... ) __asm__ (
   __isoc99_sscanf" ) __attribute__ ( ( __nothrow__ ,
   __leaf__ ) )
extern int vfscanf ( FILE * __restrict __s , const char
    * __restrict __format .
__gnuc_va_list __arg )
__attribute__ ( ( __format__ ( __scanf__ , 2 , 0 ) ) )
extern int vscanf ( const char * __restrict __format ,
   __gnuc_va_list __arg )
__attribute__ ( ( __format__ ( __scanf__ , 1 , 0 ) ) )
extern int vsscanf ( const char * __restrict __s ,
const char * __restrict __format , __gnuc_va_list __arg
__attribute__ ( ( __nothrow__ , __leaf__ ) )
                                              Analizador Sintáctico
```

```
extern int vscanf ( const char * __restrict __format ,
   __gnuc_va_list __arg ) __asm__ ( ""
   __isoc99_vscanf" )
__attribute__ ( ( __format__ ( __scanf__ , 1 , 0 ) ) )
extern int vsscanf ( const char * __restrict __s ,
   const char * __restrict __format , __gnuc_va_list
   __arg ) __asm__ ( "" "__isoc99_vsscanf" )
   __attribute__ ( ( __nothrow__ , __leaf__ ) )
__attribute__ ( ( __format__ ( __scanf__ , 2 , 0 ) ) )
extern int fgetc ( FILE * __stream ) ;
extern int getc ( FILE * __stream ) ;
extern int getchar ( void );
extern int getc_unlocked ( FILE * __stream ) ;
extern int getchar_unlocked ( void ) ;
extern int fgetc_unlocked ( FILE * __stream ) ;
extern int fputc ( int _c , FILE * _stream ) ;
extern int putc ( int __c , FILE * __stream ) ;
```

```
extern int fputc_unlocked ( int _c , FILE * _stream )
extern int putc_unlocked ( int _c , FILE * _stream )
extern int putchar_unlocked ( int __c ) ;
extern int getw ( FILE * __stream ) ;
extern int putw ( int __w , FILE * __stream ) ;
extern char * fgets ( char * __restrict __s , int __n ,
    FILE * __restrict __stream )
extern __ssize_t __getdelim ( char * * __restrict
   __lineptr ,
size_t * __restrict __n , int __delimiter ,
FILE * __restrict __stream ) ;
extern __ssize_t getdelim ( char * * __restrict
   __lineptr ,
size_t * __restrict __n , int __delimiter ,
FILE * __restrict __stream ) ;
```

```
extern __ssize_t getline ( char * * __restrict
   __lineptr ,
size_t * __restrict __n .
FILE * __restrict __stream ) ;
extern int fputs ( const char * __restrict __s , FILE *
    __restrict __stream ) ;
extern int puts ( const char * __s ) ;
extern int ungetc ( int __c , FILE * __stream ) ;
extern size_t fread ( void * __restrict __ptr , size_t
__size ,
size_t __n , FILE * __restrict __stream ) ;
extern size_t fwrite ( const void * __restrict __ptr ,
   size_t __size .
size_t __n , FILE * __restrict __s ) ;
extern size_t fread_unlocked ( void * __restrict __ptr
   , size_t __size ,
size_t __n , FILE * __restrict __stream ) ;
extern size_t fwrite_unlocked ( const void * __restrict
    __ptr , size_t __size ,
```

```
size_t __n , FILE * __restrict __stream ) ;
extern int fseek ( FILE * __stream , long int __off ,
   int __whence ) ;
extern long int ftell ( FILE * __stream );
extern void rewind ( FILE * __stream );
extern int fseeko ( FILE * __stream , __off_t __off ,
   int __whence );
extern __off_t ftello ( FILE * __stream ) ;
extern int fgetpos ( FILE * __restrict __stream ,
   fpos_t * __restrict __pos );
extern int fsetpos ( FILE * __stream , const fpos_t *
   __pos ) ;
extern void clearerr ( FILE * __stream ) __attribute__
   ( ( __nothrow__ , __leaf__ ) ) ;
extern int feof ( FILE * __stream ) __attribute__ ( (
   __nothrow__ , __leaf__ ) ) ;
extern int ferror ( FILE * __stream ) __attribute__ ( (
    __nothrow__ , __leaf__ ) ) ;
extern void clearerr_unlocked ( FILE * __stream )
                                             Analizador Sintáctico
```

```
extern int ferror_unlocked ( FILE * __stream )
   __attribute__ ( ( __nothrow__ , __leaf__ ) ) ;
extern void perror ( const char * __s );
extern int sys_nerr ;
extern const char * const sys_errlist [ ];
extern int fileno ( FILE * __stream ) __attribute__ ( (
    __nothrow__ , __leaf__ ) ) ;
extern int fileno_unlocked ( FILE * __stream )
   __attribute__ ( ( __nothrow__ , __leaf__ ) ) ;
extern FILE * popen ( const char * __command , const
   char * __modes ) ;
extern int pclose ( FILE * __stream ) ;
extern char * ctermid ( char * __s ) __attribute__ ( (
   __nothrow__ , __leaf__ ) ) ;
extern void flockfile ( FILE * __stream ) __attribute__
    ( ( __nothrow__ , __leaf__ ) ) ;
extern int ftrylockfile ( FILE * __stream )
   __attribute__ ( ( __nothrow__ , __leaf__ ) ) ;
extern void funlockfile ( FILE * __stream )
```