Analizador Sintáctico

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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

```
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"
```

Código

```
) ;
return 1 ;
}
if ( ! read_file ( argv [ 1 ] , string , maze_size
) )
{
printf ( "El archivo ingresado no se pudo abrir o no existe
) ;
return 1 ;
}
init_threads_list_mutex ( ) ;
init_maze_mutex ( ) ;
create_maze ( string , maze_size [ 0 ] , maze_size
```

Código

```
[ 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 ( ) ;
```

Código

```
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 )
```

Código

```
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" ) ;
```

Código

```
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 )
```

Código

```
{
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
```

Código

```
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
```

Código

```
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 )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
__attribute__ ( ( __pure__ ) ) __attribute__
( ( __nonnull__ ( 1 ) ) ) ;
extern char * strcpy ( char * __restrict __dest
, const char * __restrict __src )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
__attribute__ ( ( __nonnull__ ( 1 , 2 ) ) ) ;
```

Código

```
extern char * strncpy ( char * __restrict __dest
,
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__ (
```

Código

```
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__ ) )
__attribute__ ( ( __pure__ ) ) __attribute__
( ( __nonnull__ ( 1 , 2 ) ) ) ;
extern int strcoll ( const char * __s1 , const
char * __s2 )
```

Código

```
__attribute__ ( ( __nothrow__ , __leaf__ ) )
__attribute__ ( ( __pure__ ) ) __attribute__
( ( __nonnull__ ( 1 , 2 ) ) ) ;
extern size_t strxfrm ( char * __restrict __dest
,
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 ;
```

Código

```
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__
```

Código

```
( 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__ ) )
```

Código

```
__attribute__ ( ( __pure__ ) ) __attribute__
( ( __nonnull__ ( 1 ) ) ) ;
extern char * strrchr ( const char * __s , int
__c )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
__attribute__ ( ( __pure__ ) ) __attribute__
( ( __nonnull__ ( 1 ) ) ) ;
extern size_t strcspn ( const char * __s , const
char * __reject )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
__attribute__ ( ( __pure__ ) ) __attribute__
( ( __nonnull__ ( 1 , 2 ) ) ) ;
extern size_t strspn ( const char * __s , const
```

Código

```
char * __accept )
__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__
```

Código

```
( ( __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 ,
char * * __restrict __save_ptr )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
__attribute__ ( ( __nonnull__ ( 2 , 3 ) ) ) ;
extern char * strtok_r ( char * __restrict __s
, const char * __restrict __delim ,
```

Código

```
char * * __restrict __save_ptr )
__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__
```

Código

```
( ( __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 void __bzero ( void * __s , size_t __n
) __attribute__ ( ( __nothrow__ , __leaf__ )
) __attribute__ ( ( __nonnull__ ( 1 ) ) ) ;
extern void bcopy ( const void * __src , void
```

Código

```
* __dest , size_t __n )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
__attribute__ ( ( __nonnull__ ( 1 , 2 ) ) ) ;
extern void bzero ( void * __s , size_t __n )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
__attribute__ ( ( __nonnull__ ( 1 ) ) ) ;
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 )
```

Código

```
__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 )
```

Código

```
__attribute__ ( ( __nothrow__ , __leaf__ ) )
__attribute__ ( ( __pure__ ) ) __attribute__
( ( __nonnull__ ( 1 , 2 ) ) ) ;
extern int strncasecmp ( const char * __s1 ,
const char * __s2 , size_t __n )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
__attribute__ ( ( __pure__ ) ) __attribute__
( ( __nonnull__ ( 1 , 2 ) ) ) ;
extern char * strsep ( char * * __restrict __stringp
,
const char * __restrict __delim )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
__attribute__ ( ( __nonnull__ ( 1 , 2 ) ) ) ;
```

Código

```
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 )
```

Código

```
__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 ) ) ) ;
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 ;
```

Código

```
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 ;
```

Código

```
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 ;
```

Código

```
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 ;
```

Código

```
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 ;
```

Código

```
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 lseek ( int __fd , __off_t __offset
, int __whence ) __attribute__ ( ( __nothrow__
```

Código

```
, __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 __nbytes ,
__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__
```

Código

```
( ( __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 pause ( void ) ;
```

Código

```
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 ,
```

Código

```
__gid_t __group , int __flag )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
__attribute__ ( ( __nonnull__ ( 2 ) ) ) ;
extern int chdir ( const char * __path ) __attribute__
( ( __nothrow__ , __leaf__ ) ) __attribute__
( ( __nonnull__ ( 1 ) ) ) ;
extern int fchdir ( int __fd ) __attribute__
( ( __nothrow__ , __leaf__ ) ) ;
extern char * getcwd ( char * __buf , size_t
__size ) __attribute__ ( ( __nothrow__ , __leaf__
) ) ;
extern char * getwd ( char * __buf )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
```

Código

```
__attribute__ ( ( __nonnull__ ( 1 ) ) ) __attribute__
( ( __deprecated__ ) ) ;
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
```

Código

```
__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 * __arg , ... )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
__attribute__ ( ( __nonnull__ ( 1 , 2 ) ) ) ;
extern int execl ( const char * __path , const
char * __arg , ... )
```

Código

```
__attribute__ ( ( __nothrow__ , __leaf__ ) )
__attribute__ ( ( __nonnull__ ( 1 , 2 ) ) ) ;
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__
```

Código

```
( ( __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 ,
```

Código

```
_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
```

Código

```
{
_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 ,
```

Código

```
_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 ,
```

Código

```
_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 ,
```

Código

```
_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 ,
```

Código

```
_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 ,
```

Código

```
_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 ,
```

Código

```
_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 ,
```

Código

```
_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 ,
```

Código

```
_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 ,
```

Código

```
_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 ,
```

Código

```
_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 ,
```

Código

```
_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 ,
```

Código

```
_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 ,
```

Código

```
_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 ,
```

Código

```
_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 ,
```

Código

```
_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 ,
```

Código

```
_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 ,
```

Código

```
_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_LFS64_CFLAGS ,
_CS_LFS64_LDFLAGS ,
_CS_LFS64_LIBS ,
_CS_LFS64_LINTFLAGS ,
_CS_XBS5_ILP32_OFF32_CFLAGS = 1100 ,
```

Código

```
_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_ILP32_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 ,
```

Código

```
_CS_XBS5_LPBIG_OFFBIG_LIBS ,
_CS_XBS5_LPBIG_OFFBIG_LINTFLAGS ,
_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_ILP32_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 ,
```

Código

```
_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_ILP32_OFF32_LINTFLAGS ,
_CS_POSIX_V7_ILP32_OFFBIG_CFLAGS ,
_CS_POSIX_V7_ILP32_OFFBIG_LDFLAGS ,
_CS_POSIX_V7_ILP32_OFFBIG_LIBS ,
_CS_POSIX_V7_ILP32_OFFBIG_LINTFLAGS ,
```

Código

```
_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_ENV
} ;
extern long int pathconf ( const char * __path
, int __name )
```

Código

```
__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__
```

Código

```
( ( __nothrow__ , __leaf__ ) ) ;
extern __pid_t getpgrp ( void ) __attribute__
( ( __nothrow__ , __leaf__ ) ) ;
extern __pid_t __getpgid ( __pid_t __pid ) __attribute__
( ( __nothrow__ , __leaf__ ) ) ;
extern __pid_t getpgid ( __pid_t __pid ) __attribute__
( ( __nothrow__ , __leaf__ ) ) ;
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__
```

Código

```
( ( __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__
```

Código

```
) ) ;
extern int setuid ( __uid_t __uid ) __attribute__
( ( __nothrow__ , __leaf__ ) ) ;
extern int setreuid ( __uid_t __ruid , __uid_t
__euid ) __attribute__ ( ( __nothrow__ , __leaf__
) ) ;
extern int seteuid ( __uid_t __uid ) __attribute__
( ( __nothrow__ , __leaf__ ) ) ;
extern int setgid ( __gid_t __gid ) __attribute__
( ( __nothrow__ , __leaf__ ) ) ;
extern int setregid ( __gid_t __rgid , __gid_t
__egid ) __attribute__ ( ( __nothrow__ , __leaf__
) ) ;
```

Código

```
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__
```

Código

```
( ( __nothrow__ , __leaf__ ) ) ;
extern int ttyslot ( void ) __attribute__ ( (
__nothrow__ , __leaf__ ) ) ;
extern int link ( const char * __from , const
char * __to )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
__attribute__ ( ( __nonnull__ ( 1 , 2 ) ) ) ;
extern int linkat ( int __fromfd , const char
* __from , int __tofd ,
const char * __to , int __flags )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
__attribute__ ( ( __nonnull__ ( 2 , 4 ) ) ) ;
extern int symlink ( const char * __from , const
```

Código

```
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 ) ) ) ;
```

Código

```
extern ssize_t readlinkat ( int __fd , const
char * __restrict __path ,
char * __restrict __buf , size_t __len )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
__attribute__ ( ( __nonnull__ ( 2 , 3 ) ) ) ;
extern int unlink ( const char * __name ) __attribute__
( ( __nothrow__ , __leaf__ ) ) __attribute__
( ( __nonnull__ ( 1 ) ) ) ;
extern int unlinkat ( int __fd , const char *
__name , int __flag )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
__attribute__ ( ( __nonnull__ ( 2 ) ) ) ;
extern int rmdir ( const char * __path ) __attribute__
```

Código

```
( ( __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__
```

Código

```
( ( __nonnull__ ( 1 ) ) ) ;
extern char * optarg ;
extern int optind ;
extern int opterr ;
extern int optopt ;
extern int getopt ( int ___argc , char * const
* ___argv , const char * __shortopts )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
;
extern int gethostname ( char * __name , size_t
__len ) __attribute__ ( ( __nothrow__ , __leaf__
) ) __attribute__ ( ( __nonnull__ ( 1 ) ) ) ;
extern int sethostname ( const char * __name
```

Código

```
, 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 ) ) ) ;
```

Código

```
extern int vhangup ( void ) __attribute__ ( (
__nothrow__ , __leaf__ ) ) ;
extern int revoke ( const char * __file ) __attribute__
( ( __nothrow__ , __leaf__ ) ) __attribute__
( ( __nonnull__ ( 1 ) ) ) ;
extern int profil ( unsigned short int * __sample_buffer
, size_t __size ,
size_t __offset , unsigned int __scale )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
__attribute__ ( ( __nonnull__ ( 1 ) ) ) ;
extern int acct ( const char * __name ) __attribute__
( ( __nothrow__ , __leaf__ ) ) ;
extern char * getusershell ( void ) __attribute__
```

Código

```
( ( __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 ) ) ) ;
```

Código

```
extern int fsync ( int __fd ) ;
extern long int gethostid ( void ) ;
extern void sync ( void ) __attribute__ ( ( __nothrow__
, __leaf__ ) ) ;
extern int getpagesize ( void ) __attribute__
( ( __nothrow__ , __leaf__ ) ) __attribute__
( ( __const__ ) ) ;
extern int getdtablesize ( void ) __attribute__
( ( __nothrow__ , __leaf__ ) ) ;
extern int truncate ( const char * __file , __off_t
__length )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
__attribute__ ( ( __nonnull__ ( 1 ) ) ) ;
```

Código

```
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 ) ;
```

Código

```
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 ;
```

Código

```
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 ;
```

Código

```
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 ;
```

Código

```
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 ;
```

Código

```
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 ) ;
```

Código

```
}
static __inline __uint64_t
__bswap_64 ( __uint64_t __bsx )
{
return __builtin_bswap64 ( __bsx ) ;
}
union wait
{
int w_status ;
struct
{
unsigned int __w_termsig : 7 ;
unsigned int __w_coredump : 1 ;
```

Código

```
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 ;
```

Código

```
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 ;
```

Código

```
__extension__ typedef struct
{
long long int quot ;
long long int rem ;
} lldiv_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 )
```

Código

```
__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
```

Código

```
__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__ ) )
```

Código

```
__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
```

Código

```
__nptr ,
char * * __restrict __endptr , int __base )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
__attribute__ ( ( __nonnull__ ( 1 ) ) ) ;
__extension__
extern unsigned long long int strtouq ( 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 ,
```

Código

```
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 * l64a ( long int __n ) __attribute__
( ( __nothrow__ , __leaf__ ) ) ;
extern long int a64l ( const char * __s )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
```

Código

```
__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 ;
```

Código

```
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 ;
```

Código

```
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__ (
```

Código

```
( __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
{
unsigned long int __val [ ( 1024 / ( 8 * sizeof
```

Código

```
( 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 ;
} ;
```

Código

```
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 ) ;
```

Código

```
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__
```

Código

```
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 ;
```

Código

```
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 ;
```

Código

```
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 ;
```

Código

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

Código

```
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 ;
```

Código

```
} 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 ;
```

Código

```
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 ] ;
```

Código

```
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 ;
```

Código

```
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__
```

Código

```
( 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 ;
```

Código

```
} ;
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 ,
```

Código

```
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__
```

Código

```
( ( __nothrow__ , __leaf__ ) ) ;
extern double drand48 ( void ) __attribute__
( ( __nothrow__ , __leaf__ ) ) ;
extern double erand48 ( unsigned short int __xsubi
[ 3 ] ) __attribute__ ( ( __nothrow__ , __leaf__
) ) __attribute__ ( ( __nonnull__ ( 1 ) ) ) ;
extern long int lrand48 ( void ) __attribute__
( ( __nothrow__ , __leaf__ ) ) ;
extern long int nrand48 ( unsigned short int
__xsubi [ 3 ] )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
__attribute__ ( ( __nonnull__ ( 1 ) ) ) ;
extern long int mrand48 ( void ) __attribute__
```

Código

```
( ( __nothrow__ , __leaf__ ) ) ;
extern long int jrand48 ( unsigned short int
__xsubi [ 3 ] )
__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 lcong48 ( unsigned short int __param
[ 7 ] ) __attribute__ ( ( __nothrow__ , __leaf__
```

Código

```
) ) __attribute__ ( ( __nonnull__ ( 1 ) ) ) ;
struct drand48_data
{
unsigned short int __x [ 3 ] ;
unsigned short int __old_x [ 3 ] ;
unsigned short int __c ;
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__
```

Código

```
( ( __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 ) ) ) ;
extern int nrand48_r ( unsigned short int __xsubi
```

Código

```
[ 3 ] ,
struct drand48_data * __restrict __buffer ,
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 ,
```

Código

```
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 ] ,
struct drand48_data * __buffer ) __attribute__
( ( __nothrow__ , __leaf__ ) ) __attribute__
( ( __nonnull__ ( 1 , 2 ) ) ) ;
extern int lcong48_r ( unsigned short int __param
```

Código

```
[ 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 )
```

Código

```
__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__
( ( __nothrow__ , __leaf__ ) ) ;
extern void * valloc ( size_t __size ) __attribute__
( ( __nothrow__ , __leaf__ ) ) __attribute__
( ( __malloc__ ) ) ;
extern int posix_memalign ( void * * __memptr
```

Código

```
, size_t __alignment , size_t __size )
__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__
```

Código

```
) ) __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__ ) )
__attribute__ ( ( __nonnull__ ( 1 ) ) ) ;
extern void exit ( int __status ) __attribute__
( ( __nothrow__ , __leaf__ ) ) __attribute__
( ( __noreturn__ ) ) ;
extern void quick_exit ( int __status ) __attribute__
( ( __nothrow__ , __leaf__ ) ) __attribute__
```

Código

```
( ( __noreturn__ ) ) ;
extern void _Exit ( int __status ) __attribute__
( ( __nothrow__ , __leaf__ ) ) __attribute__
( ( __noreturn__ ) ) ;
extern char * getenv ( const char * __name )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
__attribute__ ( ( __nonnull__ ( 1 ) ) ) ;
extern int putenv ( char * __string ) __attribute__
( ( __nothrow__ , __leaf__ ) ) __attribute__
( ( __nonnull__ ( 1 ) ) ) ;
extern int setenv ( const char * __name , const
char * __value , int __replace )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
```

Código

```
__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__ (
```

Código

```
1 ) ) ) ;
extern char * mkdtemp ( char * __template ) __attribute__
( ( __nothrow__ , __leaf__ ) ) __attribute__
( ( __nonnull__ ( 1 ) ) ) ;
extern int system ( const char * __command )
;
extern char * realpath ( const char * __restrict
__name ,
char * __restrict __resolved ) __attribute__
( ( __nothrow__ , __leaf__ ) ) ;
typedef int ( * __compar_fn_t ) ( const void
* , const void * ) ;
extern void * bsearch ( const void * __key ,
```

Código

```
const void * __base ,
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__
```

Código

```
( ( __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__ ) )
__attribute__ ( ( __const__ ) ) ;
extern ldiv_t ldiv ( long int __numer , long
int __denom )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
```

Código

```
__attribute__ ( ( __const__ ) ) ;
__extension__ extern lldiv_t lldiv ( long long
int __numer ,
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 ,
```

Código

```
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 ,
int * __restrict __decpt , int * __restrict __sign
)
__attribute__ ( ( __nothrow__ , __leaf__ ) )
__attribute__ ( ( __nonnull__ ( 3 , 4 ) ) ) ;
```

Código

```
extern char * qfcvt ( long double __value , int
__ndigit ,
int * __restrict __decpt , int * __restrict __sign
)
__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
```

Código

```
,
size_t __len ) __attribute__ ( ( __nothrow__
, __leaf__ ) ) __attribute__ ( ( __nonnull__
( 3 , 4 , 5 ) ) ) ;
extern int fcvt_r ( 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 qecvt_r ( long double __value , int
__ndigit ,
```

Código

```
int * __restrict __decpt , int * __restrict __sign
,
char * __restrict __buf , size_t __len )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
__attribute__ ( ( __nonnull__ ( 3 , 4 , 5 ) )
) ;
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 ) )
```

Código

```
) ;
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 ,
```

Código

```
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
,
```

Código

```
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 ;
```

Código

```
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 ;
```

Código

```
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 ;
```

Código

```
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 ;
```

Código

```
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 ;
```

Código

```
typedef struct _IO_FILE __FILE ;
typedef struct
{
int __count ;
union
{
unsigned int __wch ;
char __wchb [ 4 ] ;
} __value ;
} __mbstate_t ;
typedef struct
{
__off_t __pos ;
```

Código

```
__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 ;
```

Código

```
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 ;
```

Código

```
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 ;
```

Código

```
__off_t _old_offset ;
unsigned short _cur_column ;
signed char _vtable_offset ;
char _shortbuf [ 1 ] ;
_IO_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
```

Código

```
( 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 ,
```

Código

```
__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__ ) ) ;
```

Código

```
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 ,
```

Código

```
__gnuc_va_list ) ;
extern __ssize_t _IO_padn ( _IO_FILE * , int
, __ssize_t ) ;
extern size_t _IO_sgetn ( _IO_FILE * , void *
, size_t ) ;
extern __off64_t _IO_seekoff ( _IO_FILE * , __off64_t
, int , int ) ;
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 ;
```

Código

```
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
```

Código

```
* __old , int __newfd ,
const char * __new ) __attribute__ ( ( __nothrow__
, __leaf__ ) ) ;
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 ) ;
```

Código

```
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__
) ) ;
```

Código

```
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__ ( (
```

Código

```
__nothrow__ , __leaf__ ) ) ;
extern void setbuffer ( FILE * __restrict __stream
, char * __restrict __buf ,
size_t __size ) __attribute__ ( ( __nothrow__
, __leaf__ ) ) ;
extern void setlinebuf ( FILE * __stream ) __attribute__
( ( __nothrow__ , __leaf__ ) ) ;
extern int fprintf ( FILE * __restrict __stream
,
const char * __restrict __format , ... ) ;
extern int printf ( const char * __restrict __format
, ... ) ;
extern int sprintf ( char * __restrict __s ,
```

Código

```
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 ,
```

Código

```
const char * __restrict __format , ... )
__attribute__ ( ( __nothrow__ ) ) __attribute__
( ( __format__ ( __printf__ , 3 , 4 ) ) ) ;
extern int vsnprintf ( char * __restrict __s
, size_t __maxlen ,
const char * __restrict __format , __gnuc_va_list
__arg )
__attribute__ ( ( __nothrow__ ) ) __attribute__
( ( __format__ ( __printf__ , 3 , 0 ) ) ) ;
extern int vdprintf ( int __fd , const char *
__restrict __fmt ,
__gnuc_va_list __arg )
__attribute__ ( ( __format__ ( __printf__ , 2
```

Código

```
, 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__
```

Código

```
( ( __nothrow__ , __leaf__ ) ) ;
extern int fscanf ( FILE * __restrict __stream
, const char * __restrict __format , ... ) __asm__
( "" "__isoc99_fscanf" )
;
extern int scanf ( const char * __restrict __format
, ... ) __asm__ ( "" "__isoc99_scanf" )
;
extern int sscanf ( const char * __restrict __s
, const char * __restrict __format , ... ) __asm__
( "" "__isoc99_sscanf" ) __attribute__ ( ( __nothrow__
, __leaf__ ) )
;
```

Código

```
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 )
```

Código

```
__attribute__ ( ( __nothrow__ , __leaf__ ) )
__attribute__ ( ( __format__ ( __scanf__ , 2
, 0 ) ) ) ;
extern int vfscanf ( FILE * __restrict __s ,
const char * __restrict __format , __gnuc_va_list
__arg ) __asm__ ( "" "__isoc99_vfscanf" )
__attribute__ ( ( __format__ ( __scanf__ , 2
, 0 ) ) ) ;
extern int vscanf ( const char * __restrict __format
, __gnuc_va_list __arg ) __asm__ ( "" "__isoc99_vscanf"
)
__attribute__ ( ( __format__ ( __scanf__ , 1
, 0 ) ) ) ;
```

Código

```
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 )
```

Código

```
;
extern int fputc ( int __c , FILE * __stream
) ;
extern int putc ( int __c , FILE * __stream )
;
extern int putchar ( int __c ) ;
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 )
```

Código

```
;
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
```

Código

```
__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 ,
```

Código

```
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 ) ;
```

Código

```
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
) __attribute__ ( ( __nothrow__ , __leaf__ )
```

Código

```
) ;
extern int feof_unlocked ( FILE * __stream )
__attribute__ ( ( __nothrow__ , __leaf__ ) )
;
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
```

Código

```
) __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 ) __attribute__
```

Código Pretty Print GNU

```
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)
      {
```

Código Pretty Print GNU

```
      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
      return 1;
    }
  init_threads_list_mutex ();
  init_maze_mutex ();
  create_maze (string, maze_size[0], maze_size[1]);
  create_walker (- 1, 0, 0, 2);
  pthread_create (&printing, NULL, keep_printing_maze, NU
```

Código Pretty Print GNU

```
    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
  {
```

Código Pretty Print GNU

```
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");
```

Código Pretty Print GNU

```
  }
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;
```

Código Pretty Print GNU

```
  }
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
extern void * memmove (void * __dest, const void * __src,
```

Código Pretty Print GNU

```
extern void * memccpy (void * __restrict __dest, const voi
extern void * memset (void * __s, int __c, size_t __n)__att
extern int memcmp (const void * __s1, const void * __s2, si
extern void * memchr (const void * __s, int __c, size_t __n
extern char * strcpy (char * __restrict __dest, const char
extern char * strncpy (char * __restrict __dest, const char
extern char * strcat (char * __restrict __dest, const char
extern char * strncat (char * __restrict __dest, const char
extern int strcmp (const char * __s1, const char * __s2)__a
extern int strncmp (const char * __s1, const char * __s2, s
extern int strcoll (const char * __s1, const char * __s2)__
extern size_t strxfrm (char * __restrict __dest, const char
typedef struct __locale_struct
  {
```

Código Pretty Print GNU

```
    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
extern size_t strxfrm_l (char * __dest, const char * __src
extern char * strdup (const char * __s)__attribute__ ((__n
extern char * strndup (const char * __string, size_t __n)_
extern char * strchr (const char * __s, int __c)__attribut
```

Código Pretty Print GNU

```
extern char * strrchr (const char * __s, int __c)__attribut
extern size_t strcspn (const char * __s, const char * __rej
extern size_t strspn (const char * __s, const char * __acce
extern char * strpbrk (const char * __s, const char * __acc
extern char * strstr (const char * __haystack, const char *
extern char * strtok (char * __restrict __s, const char * _
extern char * __strtok_r (char * __restrict __s, const char
extern char * strtok_r (char * __restrict __s, const char *
extern size_t strlen (const char * __s)__attribute__ ((__no
extern size_t strnlen (const char * __string, size_t __maxl
extern char * strerror (int __errnum)__attribute__ ((__noth
extern int strerror_r (int __errnum, char * __buf, size_t _
extern char * strerror_l (int __errnum, __locale_t __l)__at
```

Código Pretty Print GNU

```
extern void __bzero (void * __s, size_t __n)__attribute__ (
extern void bcopy (const void * __src, void * __dest, size_
extern void bzero (void * __s, size_t __n)__attribute__ ((_
extern int bcmp (const void * __s1, const void * __s2, size
extern char * index (const char * __s, int __c)__attribute_
extern char * rindex (const char * __s, int __c)__attribut
extern int ffs (int __i)__attribute__ ((__nothrow__, __lea
extern int strcasecmp (const char * __s1, const char * __s
extern int strncasecmp (const char * __s1, const char * __
extern char * strsep (char * * __restrict __stringp, const
extern char * strsignal (int __sig)__attribute__ ((__nothr
extern char * __stpcpy (char * __restrict __dest, const ch
extern char * stpcpy (char * __restrict __dest, const char
```

Código Pretty Print GNU

```
extern char * __stpncpy (char * __restrict __dest, const ch
extern char * stpncpy (char * __restrict __dest, const char
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;
```

Código Pretty Print GNU

```c
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;
```

Código Pretty Print GNU

```
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;
```

Código Pretty Print GNU

```
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;
```

Código Pretty Print GNU

```
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;
```

Código Pretty Print GNU

```
typedef __intptr_t intptr_t;
typedef __socklen_t socklen_t;
extern int access (const char * __name, int __type)__attrib
extern int faccessat (int __fd, const char * __file, int __
extern __off_t lseek (int __fd, __off_t __offset, int __whe
extern int close (int __fd);
extern ssize_t read (int __fd, void * __buf, size_t __nbyte
extern ssize_t write (int __fd, const void * __buf, size_t
extern ssize_t pread (int __fd, void * __buf, size_t __nbyt
extern ssize_t pwrite (int __fd, const void * __buf, size_t
extern int pipe (int __pipedes[2])__attribute__ ((__nothrow
extern unsigned int alarm (unsigned int __seconds)__attribu
extern unsigned int sleep (unsigned int __seconds);
```

Código Pretty Print GNU

```
extern __useconds_t ualarm (__useconds_t __value, __usecon
extern int usleep (__useconds_t __useconds);
extern int pause (void);
extern int chown (const char * __file, __uid_t __owner, __g
extern int fchown (int __fd, __uid_t __owner, __gid_t __gro
extern int lchown (const char * __file, __uid_t __owner, __
extern int fchownat (int __fd, const char * __file, __uid_t
extern int chdir (const char * __path)__attribute__ ((__not
extern int fchdir (int __fd)__attribute__ ((__nothrow__, __
extern char * getcwd (char * __buf, size_t __size)__attribu
extern char * getwd (char * __buf)__attribute__ ((__nothrow
extern int dup (int __fd)__attribute__ ((__nothrow__, __lea
extern int dup2 (int __fd, int __fd2)__attribute__ ((__noth
```

Código Pretty Print GNU

```
extern char * * __environ;
extern int execve (const char * __path, char * const __argv
extern int fexecve (int __fd, char * const __argv[], char *
extern int execv (const char * __path, char * const __argv
extern int execle (const char * __path, const char * __arg,
extern int execl (const char * __path, const char * __arg,
extern int execvp (const char * __file, char * const __argv
extern int execlp (const char * __file, const char * __arg,
extern int nice (int __inc)__attribute__ ((__nothrow__, __
extern void _exit (int __status)__attribute__ ((__noreturn_
enum
  {
    _PC_LINK_MAX, _PC_MAX_CANON, _PC_MAX_INPUT, _PC_NAME_MA
```

Código Pretty Print GNU

```
;
enum
  {
    _SC_ARG_MAX, _SC_CHILD_MAX, _SC_CLK_TCK, _SC_NGROUPS_MA
  };
enum
  {
    _CS_PATH, _CS_V6_WIDTH_RESTRICTED_ENVS, _CS_GNU_LIBC_V
  };
extern long int pathconf (const char * __path, int __name)
extern long int fpathconf (int __fd, int __name)__attribute
extern long int sysconf (int __name)__attribute__ ((__noth
extern size_t confstr (int __name, char * __buf, size_t __
```

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```
extern __pid_t getpid (void)__attribute__ ((__nothrow__, __
extern __pid_t getppid (void)__attribute__ ((__nothrow__, _
extern __pid_t getpgrp (void)__attribute__ ((__nothrow__, _
extern __pid_t __getpgid (__pid_t __pid)__attribute__ ((__n
extern __pid_t getpgid (__pid_t __pid)__attribute__ ((__not
extern int setpgid (__pid_t __pid, __pid_t __pgid)__attribu
extern int setpgrp (void)__attribute__ ((__nothrow__, __lea
extern __pid_t setsid (void)__attribute__ ((__nothrow__, __
extern __pid_t getsid (__pid_t __pid)__attribute__ ((__noth
extern __uid_t getuid (void)__attribute__ ((__nothrow__, __
extern __uid_t geteuid (void)__attribute__ ((__nothrow__, _
extern __gid_t getgid (void)__attribute__ ((__nothrow__, __
extern __gid_t getegid (void)__attribute__ ((__nothrow__, _
```

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```
extern int getgroups (int __size, __gid_t __list[])__attrib
extern int setuid (__uid_t __uid)__attribute__ ((__nothrow_
extern int setreuid (__uid_t __ruid, __uid_t __euid)__attr
extern int seteuid (__uid_t __uid)__attribute__ ((__nothro
extern int setgid (__gid_t __gid)__attribute__ ((__nothrow_
extern int setregid (__gid_t __rgid, __gid_t __egid)__attr
extern int setegid (__gid_t __gid)__attribute__ ((__nothro
extern __pid_t fork (void)__attribute__ ((__nothrow__));
extern __pid_t vfork (void)__attribute__ ((__nothrow__, __
extern char * ttyname (int __fd)__attribute__ ((__nothrow__
extern int ttyname_r (int __fd, char * __buf, size_t __buf
extern int isatty (int __fd)__attribute__ ((__nothrow__, __
extern int ttyslot (void)__attribute__ ((__nothrow__, __lea
```

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```
extern int link (const char * __from, const char * __to)__a
extern int linkat (int __fromfd, const char * __from, int _
extern int symlink (const char * __from, const char * __to)
extern ssize_t readlink (const char * __restrict __path, ch
extern int symlinkat (const char * __from, int __tofd, cons
extern ssize_t readlinkat (int __fd, const char * __restric
extern int unlink (const char * __name)__attribute__ ((__no
extern int unlinkat (int __fd, const char * __name, int __f
extern int rmdir (const char * __path)__attribute__ ((__not
extern __pid_t tcgetpgrp (int __fd)__attribute__ ((__nothro
extern int tcsetpgrp (int __fd, __pid_t __pgrp_id)__attribu
extern char * getlogin (void);
extern int getlogin_r (char * __name, size_t __name_len)__a
```

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```
extern int setlogin (const char * __name)__attribute__ ((_
extern char * optarg;
extern int optind;
extern int opterr;
extern int optopt;
extern int getopt (int ___argc, char * const * ___argv, co
extern int gethostname (char * __name, size_t __len)__attr
extern int sethostname (const char * __name, size_t __len)_
extern int sethostid (long int __id)__attribute__ ((__noth
extern int getdomainname (char * __name, size_t __len)__at
extern int setdomainname (const char * __name, size_t __le
extern int vhangup (void)__attribute__ ((__nothrow__, __le
extern int revoke (const char * __file)__attribute__ ((__n
```

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```
extern int profil (unsigned short int * __sample_buffer, s
extern int acct (const char * __name)__attribute__ ((__noth
extern char * getusershell (void)__attribute__ ((__nothrow_
extern void endusershell (void)__attribute__ ((__nothrow__
extern void setusershell (void)__attribute__ ((__nothrow__
extern int daemon (int __nochdir, int __noclose)__attribut
extern int chroot (const char * __path)__attribute__ ((__n
extern char * getpass (const char * __prompt)__attribute__
extern int fsync (int __fd);
extern long int gethostid (void);
extern void sync (void)__attribute__ ((__nothrow__, __leaf
extern int getpagesize (void)__attribute__ ((__nothrow__,
extern int getdtablesize (void)__attribute__ ((__nothrow__
```

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```
extern int truncate (const char * __file, __off_t __length
extern int ftruncate (int __fd, __off_t __length)__attribut
extern int brk (void * __addr)__attribute__ ((__nothrow__,
extern void * sbrk (intptr_t __delta)__attribute__ ((__not
extern long int syscall (long int __sysno, ...)__attribute_
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
  }
```

Código Pretty Print GNU

```
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;
```

Código Pretty Print GNU

```
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
  {
```

Código Pretty Print GNU

```
    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;
```

Código Pretty Print GNU

```
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;
```

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```
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 __bswap_64 (__uint64_t __bsx)
  {
    return __builtin_bswap64 (__bsx);
  }
union wait
  {
```

Código Pretty Print GNU

```
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;
```

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

Código Pretty Print GNU

```
    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;
```

Código Pretty Print GNU

```
  }
lldiv_t;
extern size_t __ctype_get_mb_cur_max (void)__attribute__ ((
extern double atof (const char * __nptr)__attribute__ ((__n
extern int atoi (const char * __nptr)__attribute__ ((__noth
extern long int atol (const char * __nptr)__attribute__ ((_
__extension__ extern long long int atoll (const char * __np
extern double strtod (const char * __restrict __nptr, char
extern float strtof (const char * __restrict __nptr, char *
extern long double strtold (const char * __restrict __nptr,
extern long int strtol (const char * __restrict __nptr, cha
extern unsigned long int strtoul (const char * __restrict _
__extension__ extern long long int strtoq (const char * __r
```

Código Pretty Print GNU

```
__extension__ extern unsigned long long int strtouq (const
__extension__ extern long long int strtoll (const char * _
__extension__ extern unsigned long long int strtoull (const
extern char * l64a (long int __n)__attribute__ ((__nothrow_
extern long int a64l (const char * __s)__attribute__ ((__no
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;
```

Código Pretty Print GNU

```
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;
```

Código Pretty Print GNU

```
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__ (__
typedef unsigned int u_int16_t __attribute__ ((__mode__ (__
```

Código Pretty Print GNU

```
typedef unsigned int u_int32_t __attribute__ ((__mode__ (__
typedef unsigned int u_int64_t __attribute__ ((__mode__ (__
typedef int register_t __attribute__ ((__mode__ (__word__))
typedef int __sig_atomic_t;
typedef struct
  {
    unsigned long int __val[ (1024 / (8 * sizeof (unsigned
  }
__sigset_t;
typedef __sigset_t sigset_t;
struct timespec
  {
    __time_t tv_sec;
```

Código Pretty Print GNU

```
    __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
  }
```

Código Pretty Print GNU

```
fd_set;
typedef __fd_mask fd_mask;
extern int select (int __nfds, fd_set * __restrict __readf
extern int pselect (int __nfds, fd_set * __restrict __readf
__extension__ extern unsigned int gnu_dev_major (unsigned
__extension__ extern unsigned int gnu_dev_minor (unsigned
__extension__ extern unsigned long long int gnu_dev_makedev
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
  {
```

Código Pretty Print GNU

```
    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
      {
```

Código Pretty Print GNU

```
      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;
}
```

Código Pretty Print GNU

```
pthread_mutex_t;
typedef union
  {
    char __size[4];
    int __align;
  }
pthread_mutexattr_t;
typedef union
  {
    struct
      {
        int __lock;
        unsigned int __futex;
```

Código Pretty Print GNU

```
    __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
 {
```

Código Pretty Print GNU

```
    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;
```

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```
    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;
```

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```
  }
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;
```

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```
  }
pthread_barrier_t;
typedef union
  {
    char __size[4];
    int __align;
  }
pthread_barrierattr_t;
extern long int random (void)__attribute__ ((__nothrow__, _
extern void srandom (unsigned int __seed)__attribute__ ((__
extern char * initstate (unsigned int __seed, char * __stat
extern char * setstate (char * __statebuf)__attribute__ ((_
struct random_data
  {
```

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```
    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
extern int srandom_r (unsigned int __seed, struct random_da
extern int initstate_r (unsigned int __seed, char * __restr
extern int setstate_r (char * __restrict __statebuf, struct
extern int rand (void)__attribute__ ((__nothrow__, __leaf_
```

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```
extern void srand (unsigned int __seed)__attribute__ ((__no
extern int rand_r (unsigned int * __seed)__attribute__ ((__
extern double drand48 (void)__attribute__ ((__nothrow__, __
extern double erand48 (unsigned short int __xsubi[3])__attr
extern long int lrand48 (void)__attribute__ ((__nothrow__,
extern long int nrand48 (unsigned short int __xsubi[3])__at
extern long int mrand48 (void)__attribute__ ((__nothrow__,
extern long int jrand48 (unsigned short int __xsubi[3])__at
extern void srand48 (long int __seedval)__attribute__ ((__n
extern unsigned short int * seed48 (unsigned short int __se
extern void lcong48 (unsigned short int __param[7])__attrib
struct drand48_data
  {
```

Código Pretty Print GNU

```
  unsigned short int __x[3];
  unsigned short int __old_x[3];
  unsigned short int __c;
  unsigned short int __init;
  __extension__ unsigned long long int __a;
 };
extern int drand48_r (struct drand48_data * __restrict __bu
extern int erand48_r (unsigned short int __xsubi[3], struct
extern int lrand48_r (struct drand48_data * __restrict __bu
extern int nrand48_r (unsigned short int __xsubi[3], struct
extern int mrand48_r (struct drand48_data * __restrict __bu
extern int jrand48_r (unsigned short int __xsubi[3], struct
extern int srand48_r (long int __seedval, struct drand48_da
```

Código Pretty Print GNU

```
extern int seed48_r (unsigned short int __seed16v[3], struc
extern int lcong48_r (unsigned short int __param[7], struct
extern void * malloc (size_t __size)__attribute__ ((__nothr
extern void * calloc (size_t __nmemb, size_t __size)__attri
extern void * realloc (void * __ptr, size_t __size)__attrib
extern void free (void * __ptr)__attribute__ ((__nothrow__
extern void cfree (void * __ptr)__attribute__ ((__nothrow__
extern void * alloca (size_t __size)__attribute__ ((__nothr
extern void * valloc (size_t __size)__attribute__ ((__nothr
extern int posix_memalign (void * * __memptr, size_t __alig
extern void * aligned_alloc (size_t __alignment, size_t __s
extern void abort (void)__attribute__ ((__nothrow__, __leaf
extern int atexit (void (* __func) (void))__attribute__ ((
```

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```
extern int at_quick_exit (void (* __func) (void))__attribut
extern int on_exit (void (* __func) (int __status, void * _
extern void exit (int __status)__attribute__ ((__nothrow__
extern void quick_exit (int __status)__attribute__ ((__noth
extern void _Exit (int __status)__attribute__ ((__nothrow__
extern char * getenv (const char * __name)__attribute__ ((
extern int putenv (char * __string)__attribute__ ((__nothro
extern int setenv (const char * __name, const char * __valu
extern int unsetenv (const char * __name)__attribute__ ((_
extern int clearenv (void)__attribute__ ((__nothrow__, __le
extern char * mktemp (char * __template)__attribute__ ((__
extern int mkstemp (char * __template)__attribute__ ((__no
extern int mkstemps (char * __template, int __suffixlen)__a
```

Código Pretty Print GNU

```
extern char * mkdtemp (char * __template)__attribute__ ((_
extern int system (const char * __command);
extern char * realpath (const char * __restrict __name, cha
typedef int (* __compar_fn_t) (const void *, const void *);
extern void * bsearch (const void * __key, const void * __b
extern void qsort (void * __base, size_t __nmemb, size_t __
extern int abs (int __x)__attribute__ ((__nothrow__, __leaf
extern long int labs (long int __x)__attribute__ ((__nothro
__extension__ extern long long int llabs (long long int __x
extern div_t div (int __numer, int __denom)__attribute__ ((
extern ldiv_t ldiv (long int __numer, long int __denom)__at
__extension__ extern lldiv_t lldiv (long long int __numer,
extern char * ecvt (double __value, int __ndigit, int * __r
```

Código Pretty Print GNU

```
extern char * fcvt (double __value, int __ndigit, int * __r
extern char * gcvt (double __value, int __ndigit, char * __
extern char * qecvt (long double __value, int __ndigit, int
extern char * qfcvt (long double __value, int __ndigit, int
extern char * qgcvt (long double __value, int __ndigit, cha
extern int ecvt_r (double __value, int __ndigit, int * __re
extern int fcvt_r (double __value, int __ndigit, int * __re
extern int qecvt_r (long double __value, int __ndigit, int
extern int qfcvt_r (long double __value, int __ndigit, int
extern int mblen (const char * __s, size_t __n)__attribute_
extern int mbtowc (wchar_t * __restrict __pwc, const char *
extern int wctomb (char * __s, wchar_t __wchar)__attribute_
extern size_t mbstowcs (wchar_t * __restrict __pwcs, const
```

Código Pretty Print GNU

```
extern size_t wcstombs (char * __restrict __s, const wchar_
extern int rpmatch (const char * __response)__attribute__ (
extern int getsubopt (char * * __restrict __optionp, char *
extern int getloadavg (double __loadavg[], int __nelem)__at
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;
```

Código Pretty Print GNU

```c
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;
```

Código Pretty Print GNU

```
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;
```

Código Pretty Print GNU

```
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;
```

Código Pretty Print GNU

```
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
  {
```

Código Pretty Print GNU

```
  int __count;
  union
   {
    unsigned int __wch;
    char __wchb[4];
   }
  __value;
 }
__mbstate_t;
typedef struct
 {
  __off_t __pos;
  __mbstate_t __state;
```

Código Pretty Print GNU

```
  }
_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
  {
```

Código Pretty Print GNU

```
    struct _IO_marker * _next;
    struct _IO_FILE * _sbuf;
    int _pos;
  };
enum __codecvt_result
  {
    __codecvt_ok, __codecvt_partial, __codecvt_error, __coc
  };
struct _IO_FILE
  {
    int _flags;
    char * _IO_read_ptr;
    char * _IO_read_end;
```

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```
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;
```

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```
__off_t _old_offset;
unsigned short _cur_column;
signed char _vtable_offset;
char _shortbuf[1];
_IO_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 *)- s
```

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```
  };
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 * __b
typedef __ssize_t __io_write_fn (void * __cookie, const cha
typedef int __io_seek_fn (void * __cookie, __off64_t * __po
typedef int __io_close_fn (void * __cookie);
extern int __underflow (_IO_FILE *);
extern int __uflow (_IO_FILE *);
extern int __overflow (_IO_FILE *, int);
```

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```
extern int _IO_getc (_IO_FILE * __fp);
extern int _IO_putc (int __c, _IO_FILE * __fp);
extern int _IO_feof (_IO_FILE * __fp)__attribute__ ((__noth
extern int _IO_ferror (_IO_FILE * __fp)__attribute__ ((__no
extern int _IO_peekc_locked (_IO_FILE * __fp);
extern void _IO_flockfile (_IO_FILE *)__attribute__ ((__not
extern void _IO_funlockfile (_IO_FILE *)__attribute__ ((__n
extern int _IO_ftrylockfile (_IO_FILE *)__attribute__ ((__n
extern int _IO_vfscanf (_IO_FILE * __restrict, const char *
extern int _IO_vfprintf (_IO_FILE * __restrict, const char
extern __ssize_t _IO_padn (_IO_FILE *, int, __ssize_t);
extern size_t _IO_sgetn (_IO_FILE *, void *, size_t);
extern __off64_t _IO_seekoff (_IO_FILE *, __off64_t, int, i
```

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```
extern __off64_t _IO_seekpos (_IO_FILE *, __off64_t, int);
extern void _IO_free_backup_area (_IO_FILE *)__attribute__
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__ ((
extern int rename (const char * __old, const char * __new)_
extern int renameat (int __oldfd, const char * __old, int _
extern FILE * tmpfile (void);
```

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```
extern char * tmpnam (char * __s)__attribute__ ((__nothrow_
extern char * tmpnam_r (char * __s)__attribute__ ((__nothro
extern char * tempnam (const char * __dir, const char * __p
extern int fclose (FILE * __stream);
extern int fflush (FILE * __stream);
extern int fflush_unlocked (FILE * __stream);
extern FILE * fopen (const char * __restrict __filename, co
extern FILE * freopen (const char * __restrict __filename,
extern FILE * fdopen (int __fd, const char * __modes)__attr
extern FILE * fmemopen (void * __s, size_t __len, const cha
extern FILE * open_memstream (char * * __bufloc, size_t * _
extern void setbuf (FILE * __restrict __stream, char * __re
extern int setvbuf (FILE * __restrict __stream, char * __re
```

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```
extern void setbuffer (FILE * __restrict __stream, char * _
extern void setlinebuf (FILE * __stream)__attribute__ ((__r
extern int fprintf (FILE * __restrict __stream, const char
extern int printf (const char * __restrict __format, ...);
extern int sprintf (char * __restrict __s, const char * __r
extern int vfprintf (FILE * __restrict __s, const char * __
extern int vprintf (const char * __restrict __format, __gnu
extern int vsprintf (char * __restrict __s, const char * __
extern int snprintf (char * __restrict __s, size_t __maxlen
extern int vsnprintf (char * __restrict __s, size_t __maxle
extern int vdprintf (int __fd, const char * __restrict __fm
extern int dprintf (int __fd, const char * __restrict __fmt
extern int fscanf (FILE * __restrict __stream, const char *
```

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```
extern int scanf (const char * __restrict __format, ...);
extern int sscanf (const char * __restrict __s, const char
extern int fscanf (FILE * __restrict __stream, const char *
extern int scanf (const char * __restrict __format, ...)__a
extern int sscanf (const char * __restrict __s, const char
extern int vfscanf (FILE * __restrict __s, const char * __r
extern int vscanf (const char * __restrict __format, __gnuc
extern int vsscanf (const char * __restrict __s, const char
extern int vfscanf (FILE * __restrict __s, const char * __r
extern int vscanf (const char * __restrict __format, __gnuc
extern int vsscanf (const char * __restrict __s, const char
extern int fgetc (FILE * __stream);
extern int getc (FILE * __stream);
```

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```
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 putchar (int __c);
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 *
```

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```
extern __ssize_t __getdelim (char * * __restrict __lineptr,
extern __ssize_t getdelim (char * * __restrict __lineptr, s
extern __ssize_t getline (char * * __restrict __lineptr, si
extern int fputs (const char * __restrict __s, FILE * __res
extern int puts (const char * __s);
extern int ungetc (int __c, FILE * __stream);
extern size_t fread (void * __restrict __ptr, size_t __size
extern size_t fwrite (const void * __restrict __ptr, size_t
extern size_t fread_unlocked (void * __restrict __ptr, size
extern size_t fwrite_unlocked (const void * __restrict __pt
extern int fseek (FILE * __stream, long int __off, int __wh
extern long int ftell (FILE * __stream);
extern void rewind (FILE * __stream);
```

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```
extern int fseeko (FILE * __stream, __off_t __off, int __wh
extern __off_t ftello (FILE * __stream);
extern int fgetpos (FILE * __restrict __stream, fpos_t * _
extern int fsetpos (FILE * __stream, const fpos_t * __pos);
extern void clearerr (FILE * __stream)__attribute__ ((__not
extern int feof (FILE * __stream)__attribute__ ((__nothrow_
extern int ferror (FILE * __stream)__attribute__ ((__nothro
extern void clearerr_unlocked (FILE * __stream)__attribute_
extern int feof_unlocked (FILE * __stream)__attribute__ ((_
extern int ferror_unlocked (FILE * __stream)__attribute__ (
extern void perror (const char * __s);
extern int sys_nerr;
extern const char * const sys_errlist[];
```

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```
extern int fileno (FILE * __stream)__attribute__ ((__nothro
extern int fileno_unlocked (FILE * __stream)__attribute__ (
extern FILE * popen (const char * __command, const char * _
extern int pclose (FILE * __stream);
extern char * ctermid (char * __s)__attribute__ ((__nothrow
extern void flockfile (FILE * __stream)__attribute__ ((__no
extern int ftrylockfile (FILE * __stream)__attribute__ ((__
extern void funlockfile (FILE * __stream)__attribute__ ((__
```