NAME

readint - buffered input for files containing integer data

SYNOPSIS

```
#include <rwint.h>
readint(inbuf)
struct IOBUF *inbuf;
```

DESCRIPTION

This subroutine provides buffered input capability for files containing integer data in records whose size is a power of two. It returns the starting address of the record in r0. However, if an error is detected or an end of file is encountered, a 0 is returned in r0 and a return code is returned in the structure variable, errval. The possible return codes are discussed below under DIAGNOSTICS. Inbuf is the address of a 522(10) byte buffer area whose format is:

```
struct IOBUF
  {  int fildes;
     int errval;
     int idata;
     int recsize;
     int nread;
     int intbuf[IBUFSIZE];
  };
```

where

fildes — is the file descriptor of an open input file.

errval — is the return code which indicates an I/O error or an EOF.

idata — is the current number of records in the buffer that have been retrieved by the calling program. The calling program initializes this variable by setting it equal to the maximum number of records that can be contained in intbuf[].

recsize — is the record size in words. The record size must be a power of two; ie. 2, 4, 8, 16, etc., words.

nread — contains the number of bytes that have been read into the buffer. This variable should not be used or changed by the calling program.

intbuf — is the data buffer and should not be written into by the calling program.

IBUFSIZE — contains the value, 256.

The calling program must initialize the following structure variables for each input file that is to be read. These variables must be initialized prior to the first call to this subroutine to read the appropriate input file.

```
<structure>.fildes= <file descriptor of input file>;
<structure>.idata= <max. number of records that will
          fit in buffer (IBUFSIZE/recsize)>;
<structure name>.recsize= <record size in words>;
```

FILES

/usr/include/rwint.h which contains the definitions for IOBUF and IBUFSIZE.

LIBRARY

/lib/lib1.a

SEE ALSO

writint(3L)

DIAGNOSTICS

When this subroutine returns a 0 in r0, the following codes are returned in the structure variable, errval:

-1 I/O error. 0 End of file.

BUGS