FORTRAN:

```
PROGRAM errexample

INTEGER  dsgdims, dferrno
INTEGER ret, rank, sizes(3)

ret = dsgdims('textfile', rank, sizes, 3)
if (ret .lt. 0) then
    print *, 'Error...DFerror = ', dferrno()
end if
stop
end
```

C :

```
extern int DFerror;

main()
{
    int ret, rank, sizes[3];

    ret = DFSDgetdims("textfile", &rank, sizes, 3);
    if (ret < 0)
        printf("Error...DFerror = %d\n", DFerror);
}
```

Chapter Overview

This chapter discusses the error reporting procedures of HDF.

Error Handling in HDF

Execution errors are reported in two ways: (1) in the values returned by HDF calls, and (2) in the form of an error code stored in a global integer variable called DFerror.

In the case of (1), the meanings of the values reported are described in the specifications for the individual routines. When the error is closely related to the function of the routine, this value is often sufficient to diagnose the error.

However, many times the error that causes a routine to fail is more general, or occurs at a level that is not easily reflected in the return value. In this case, the error code returned in DFerror can often be useful. Since the variable DFerror is global, you can include it in a C program by declaring DFerror to be external, or by including the file df.h with your code. For Fortran, there is a routine called dferrno that returns the value of DFerror.

Error codes for DFerror are included in the listing of df.h, which can be found in Appendix B, "Header Files."

The following programs, the first in FORTRAN and the second in C, illustrate the use of DFerror. If you assume that the file called "textfile" is not an HDF file, the call to DFSDgetdims (dsgdims) produces an error, the value of ret is set to -1, and DFerror is assigned the value -14, which means "Not an HDF file."

Chapter 8 Error Handling in HDF

Chapter Overview

Error Handling in HDF