

fopen Function

- > The fopen function is used to assign a specific file to a file pointer.
- > Example:

```
weather = fopen("weather.txt","r");

File pointer

File name

File status:

r for read.

w for write.

Must use lower case.
```

NOTE: "weather.txt" only defines the file name, not the location of the file.

fopen Function (continued)

- To use the fopen function effectively, a file location must be predefined. This is generally done using a preprocessor directive that specifies the file location.
- > Example:

```
/* Processor directive */
#define inputfile "u:\\engr 200\\weatherdata.txt"
```

Must use double backslashes. The first backslash is the escape character, and the second backslash is the directory path.

```
Putting it all Together

Example:

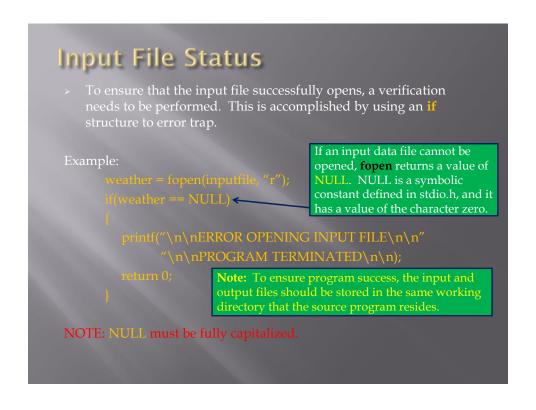
/* Preprocessor directives */
#include <stdio h>
#include <math.h>
#define inputfile "u:\\engr 200\\weatherdata.txt"

/* Main function */
int main(void)

/* Declare variables */
FILE *weather;

/* Open input file */
weather = fopen(inputfile, "r");

Opens input file and assigns address to pointer.
```



Closing Files

> The fclose function is used to close a file.

Example:

fclose(weather);

File pointer name is all that is needed between parentheses. This statement will close the input file from the previous examples.

Note: Input and output files can be closed at any stage in a program, but once closed they cannot be accessed until they are reopened again. Thus, most programmers will not close any files until the end of the program.

