

Reading Binary Files

Files are read in C++ using an object of class **ifstream**. There are several member functions (methods) in this class. The most useful ones are listed below:

- **open** – Open a file before reading it.
- **read** – Read from the file.
- **close** – Close the file when done reading.
- **fail** – Check for failure after opening.
- **eof** – Check for end of file after reading.

To use these functions, we must declare an object of type **ifstream**. For example:

```
ifstream ifile ;
```

Using the open() function: Similar to open for writing.

```
ifile.open( xxxx , yyyy ) ;
```

File name.
C-style character string

ios::binary
Type of file specification

Using the read() function:

```
ifile.read( xxxx , yyyy ) ;
```

Address of data to be read
Address is coerced to a (char *)

Number of bytes of data to read

Using the close() function:

Easy! There are no parameters. Example: `ifile.close()`

Using the fail() function:

Also easy! There are no parameters. Example: `ifile.fail()`

Using the eof() function:

Still easy! There are no parameters. Example: `ifile.eof()`