



`mycopy.cpp`

A File Processing Example



OPENING THE FILES

```
string input;
cout << "Source file: ";
getline(cin, input);

ifstream in(input, ios::binary);

if (!in.good())
// if (!in)
{
    cerr << "Unable to open "
        << input << endl;
    exit(1);
}
```

```
string output;
cout << "Destination file: ";
getline(cin, output);

ofstream out(output, ios::binary);

if (!out.good())
// if (!in)
{
    cerr << "Unable to open "
        << output << endl;
    exit(1);
}
```



CHARACTER I/O

```
char c;  
while (in.get(c))  
    out.put(c);
```

```
int c;  
while ((c = in.get()) != EOF)  
    out.put(c);
```



BLOCK I/O

```
istream& read(char* buffer,  
              streamsize n);
```

```
ostream& write(const char* buffer,  
              streamsize n);
```

```
streamsize gcount()const;
```

```
while (in) ...
```

```
if (out) ...
```

```
char block[512];  
int count;
```

```
in.read(block, 512);  
while ((count = in.gcount()) > 0)  
{  
    out.write(block, count);  
    in.read(block, 512);  
}
```



BUFFER I/O

- `out << in.rdbuf();`
- Clever but limited application
- `streambuf* rdbuf() const;`
- `ostream& operator<<
 (streambuf* sb);`