

C++ Programming

Files and Streams 2

Mostafa S. Ibrahim

Teaching, Training and Coaching since more than a decade!

Artificial Intelligence & Computer Vision Researcher

PhD from Simon Fraser University - Canada

Bachelor / Msc from Cairo University - Egypt

Ex-(Software Engineer / ICPC World Finalist)



Reading and writing (appending)

```
3
4 #include<fstream> // for ifstream and ofstream
5 using namespace std;
6
7 int main() {
8     bool append = true;
9
10    auto status = ios::in | ios::out | ios::app;
11
12    if (!append)
13        status = ios::in | ios::out | ios::trunc; // overwrite
14
15    string path = "names.txt";
16    fstream file_handler(path.c_str(), status);
17
18    if (file_handler.fail()) {
19        cout << "Can't open the file\n";
20        return 0;
21    }
22    string first, second;
23    file_handler >> first >> second;
24
25    cout << first << " " << second << "\n";
26
27    file_handler.clear(); // if any internal errors, before writing
28
29    file_handler << "\nibrahim\n";
30
31    file_handler.close();
```

names.txt ✖

```
1 msotafa
2 saad
```

Console ✖

```
<terminated> ztem
msotafa saad
```

names.txt ✖

```
1 mostafa
2 saad
3 ibrahim
4 |
```

Reading whole file content

```
4
5 int main() {
6     string path = "names.txt";
7     fstream file_handler(path.c_str());
8
9     if (file_handler.fail()) {
10         cout << "Can't open the file\n";
11         return 0;
12     }
13     string line;
14
15     while (getline(file_handler, line))
16         cout << line << "\n";
17
18     file_handler.close();
19
20     return 0;
21 }
22
```

Console Problems Tasks Properties 1010 0101 Call C

<terminated> ztemp [C/C++ Application] /home/moustafa/woi

mostafa
saad
ibrahim
|

“Acquire knowledge and impart it to the people.”

“Seek knowledge from the Cradle to the Grave.”