

```
1  #include <string>
2  #include <iostream>
3  #include <algorithm>
4  #include <fstream>
5  #include <iomanip>
6  #include <queue>
7
8  using namespace std;
9
10 struct bryntype {
11     int numberofmajors;
12     string fieldofstudy;
13 };
14
15 int main() {
16     ifstream inf;
17     ofstream outf;
18     inf.open("datafile.txt");
19     outf.open("outputfile.txt");
20     queue<bryntype> intstringqueue;
21     bryntype classdata;
22     while (!inf.eof()){
23         inf >> classdata.numberofmajors >> classdata.fieldofstudy >> ws;
24         intstringqueue.push(classdata);
25     }
26     while (!intstringqueue.empty()) {
27         outf << setw(12) << left << intstringqueue.front().fieldofstudy << " " <<
28         intstringqueue.front().numberofmajors << endl;
29         intstringqueue.pop();
30     }
31     outf << endl;
32     system("pause");
33 }
34
35
```