

```
1  #include <iostream>
2  #include <string>
3  #include <iomanip>
4  #include "concordance.h"
5
6  using namespace std;
7
8  int main() {
9      char exit = 'n';
10     int choice;
11     do {
12         cout << left;
13         cout << "What would you like to do?" << endl << endl;
14         cout << setw(3) << "1" << setw(3) << "-" << "Display concordance" <<  ↗
15         endl;
16         cout << setw(3) << "2" << setw(3) << "-" << "Display letter of  ↗
17         concordance (A-Z)" << endl;
18         cout << setw(3) << "3" << setw(3) << "-" << "Find Word" << endl;
19         cout << setw(3) << "4" << setw(3) << "-" << "Exit" << endl << endl;
20
21         cin >> choice;
22
23         while (!cin) {
24             cin.clear();
25             cin.ignore(numeric_limits<streamsize>::max(), '\n');
26             cin >> choice;
27         }
28
29         concordance gettysburg;
30         gettysburg.createFrom("gettysburg.txt");
31
32         if (choice == 1) {
33             cout << endl;
34             gettysburg.display();
35             cout << endl;
36
37             cin.ignore();
38         }
39         else if (choice == 2) {
40             char character;
41             cout << "Choose a letter A-Z: ";
42             cin >> character;
43
44             while (!cin) {
45                 cin.clear();
46                 cin.ignore(numeric_limits<streamsize>::max(), '\n');
47                 cin >> character;
48             }
49         }
50     } while (exit != 'n');
```

```
48         cout << endl;
49
50         gettysburg.display(character);
51
52     }
53     else if (choice == 3) {
54         string word;
55         cout << "What word would you like to know is in the concordance?: ";
56         cin >> word;
57
58         while (!cin) {
59             cin.clear();
60             cin.ignore(numeric_limits<streamsize>::max(), '\n');
61             cin >> word;
62         }
63
64         cout << endl;
65
66         if (gettysburg.existenceOf(word) == 1) {
67             cout << word << " is in the concordance" << endl << endl;
68         }
69         else {
70             cout << word << " is not in the concordance" << endl << endl;
71         }
72     }
73
74     else if (choice == 4) {
75         exit = 'y';
76     }
77     else {
78         cout << "That is not a choice try again." << endl;
79     }
80 } while (exit != 'y');
81 return 0;
82 }
```