

```
#include <iostream>

#include <fstream>

#include <vector>

using namespace std;


int main() {

    int rows, cols;

    cout << "Enter number of rows: ";

    cin >> rows;

    cout << "Enter number of columns: ";

    cin >> cols;


    vector<vector<string>> table(rows, vector<string>(cols));


    for (int i = 0; i < rows; ++i) {

        cout << "Enter data for row " << i + 1 << ":\n";

        for (int j = 0; j < cols; ++j) {

            cout << " Column " << j + 1 << ": ";

            cin >> table[i][j];

        }

    }


    ofstream htmlFile("table.html");


    if (!htmlFile) {
```

```
cerr << "Error creating file!" << endl;
return 1;
}
```

```
htmlFile << "<!DOCTYPE html>\n<html>\n<head>\n"
    << "<title>Generated Table</title>\n"
    << "<style>\n"
    << "table { border-collapse: collapse; width: 50%; margin: 20px auto; }\n"
    << "th, td { border: 1px solid #333; padding: 8px; text-align: center; }\n"
    << "th { background-color: #f2f2f2; }\n"
    << "</style>\n"
    << "</head>\n<body>\n"
    << "<h2 style='text-align:center;'>Dynamic HTML Table</h2>\n"
    << "<table>\n";
```

```
htmlFile << "<tr>";
for (int j = 0; j < cols; ++j) {
    htmlFile << "<th>Col " << j + 1 << "</th>";
}
htmlFile << "</tr>\n";
```

```
for (int i = 0; i < rows; ++i) {
    htmlFile << "<tr>";
    for (int j = 0; j < cols; ++j) {
```

```
        htmlFile << "<td>" << table[i][j] << "</td>";  
    }  
    htmlFile << "</tr>\n";  
}  
  
htmlFile << "</table>\n</body>\n</html>";  
  
htmlFile.close();  
cout << "HTML table saved as 'table.html!'" << endl;  
  
return 0;  
}
```