

Lab_01

Code Implementation

```
#include <iostream>

#include <fstream>

#include <vector>

#include <string>

#include <cstdio>

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));


    cout << "\nEnter data for the table:\n";

    for (int i = 0; i < rows; ++i) {
        for (int j = 0; j < cols; ++j) {
            cout << "Enter data for cell [" << i+1 << "]" << j+1 << ": ";

            cin >> ws;

            getline(cin, table[i][j]);
        }
    }
```

```
}
```

```
string html = "<!DOCTYPE html>\n<html>\n<head>\n<title>HTML Table</title>\n";  
html += "<style>table { border-collapse: collapse; width: 80%; } ";  
html += "th, td { border: 1px solid black; padding: 8px; text-align: left; } ";  
html += "tr:nth-child(even) { background-color: #f2f2f2; }</style>\n</head>\n<body>\n";  
html += "<h2>HTML Table</h2>\n<table>\n";
```

```
html += "<tr>";  
for (int j = 0; j < cols; ++j) {  
    html += "<th>" + table[0][j] + "</th>";  
}  
html += "</tr>\n";
```

```
for (int i = 1; i < rows; ++i) {  
    html += "<tr>";  
    for (int j = 0; j < cols; ++j) {  
        html += "<td>" + table[i][j] + "</td>";  
    }  
    html += "</tr>\n";  
}
```

```
html += "</table>\n</body>\n</html>";
```

```
string filePath = "C:\\Users\\LENOVO T450\\Desktop\\IAD_Labs\\table.html";
```

```
ofstream file(filePath.c_str());  
if (file.is_open()) {  
    file << html;  
    file.close();  
    cout << "\nHTML table has been saved successfully to:\n" << filePath << endl;  
} else {  
    cerr << "Error: Could not save HTML file.\n";  
}  
  
return 0;  
}
```