

# Rao Abdul Saboor

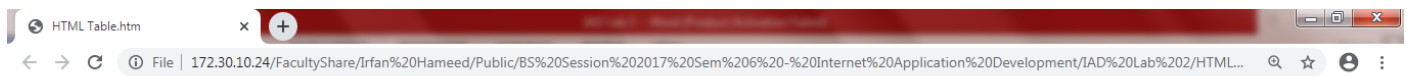
## IAD(Lab 01)

### Date: February 28, 2024

## Description of Task

Write code using C/C++ which performs following tasks:

- Prompt the user to enter number of columns?
- Prompt the user to enter number of rows?
- Get data cell by cell from user using a loop?
- Generate an html page to display above data in a table?
- Store the page in a folder on desktop.



### HTML Table

Company	Contact	Country
Alfreds Futterkiste	Maria Anders	Germany
Centro comercial Moctezuma	Francisco Chang	Mexico
Ernst Handel	Roland Mendel	Austria
Island Trading	Helen Bennett	UK
Laughing Bacchus Winecellars	Yoshi Tannamuri	Canada
Magazzini Alimentari Riuniti	Giovanni Rovelli	Italy



Figure 1

### Code Listing 1

```
<!DOCTYPE html>  
<html>  
<head>  
<style>
```

```
table {
  font-family: arial, sans-serif;
  border-collapse: collapse;
  width: 100%;
}
```

```
td, th {
  border: 1px solid #dddddd;
  text-align: left;
  padding: 8px;
}
```

```
tr:nth-child(even) {
  background-color: #dddddd;
}
```

```
</style>
```

```
</head>
```

```
<body>
```

```
<h2>HTML Table</h2>
```

```
<table>
```

```
<tr>
```

```
<th>Company</th>
```

```
<th>Contact</th>
```

```
<th>Country</th>
```

```
</tr>
```

```
<tr>
```

```
<td>Alfreds Futterkiste</td>
```

```
<td>Maria Anders</td>
```

```
<td>Germany</td>
```

```
</tr>
```

```
<tr>
```

```
<td>Centro comercial Moctezuma</td>
```

```
<td>Francisco Chang</td>
```

```
<td>Mexico</td>
```

```
</tr>
```

```
<tr>
```

```
<td>Ernst Handel</td>
```

```
<td>Roland Mendel</td>
```

```
<td>Austria</td>
```

```
</tr>
```

```
<tr>
```

```
<td>Island Trading</td>
```

```
<td>Helen Bennett</td>
```

```
<td>UK</td>
```

```
</tr>
```

```
<tr>
```

```
<td>Laughing Bacchus Winecellars</td>
```

```
<td>Yoshi Tannamuri</td>
```

```
<td>Canada</td>
```

```
</tr>
```

```
<tr>
```

```
<td>Magazzini Alimentari Riuniti</td>
```

```
<td>Giovanni Rovelli</td>
```

```
<td>Italy</td>
```

```
</tr>
```

```
</table>
```

```
</body>
```

```
</html>
```

- The C++ code for the given problem is given as:

```
#include <iostream>
```

```
#include <fstream>
```

```
using namespace std;
```

```
int main()
```

```
{
```

```
    int rows, cols;
```

```
    // Prompt the user to enter the number of columns
```

```
    cout << "Enter the number of columns: ";
```

```
    cin >> cols;
```

```
    // Prompt the user to enter the number of rows
```

```
    cout << "Enter the number of rows: ";
```

```
    cin >> rows;
```

```
    // Get data cell by cell from the user
```

```
    string data[rows][cols];
```

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

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

```
            cout << "Enter data for row " << i+1 << ", column " << j+1 << ": ";
```

```
            cin >> data[i][j];
```

```
        }
```

```
    }
```

```
    // Generate HTML page
```

```
    ofstream htmlFile;
```

```
    htmlFile.open("C:\\Users\\HF\\Desktop\\table.html"); // Change YourUsername to your actual username
```

```
    htmlFile << "<!DOCTYPE html>\n";
```

```
    htmlFile << "<html>\n";
```

```
    htmlFile << "<head>\n";
```

```
    htmlFile << "<style>\n";
```

```
    htmlFile << "table {\n";
```

```
    htmlFile << "font-family: arial, sans-serif;\n";
```

```
    htmlFile << "border-collapse: collapse;\n";
```

```
    htmlFile << "width: 100%;\n";
```

```
    htmlFile << "}\n";
```

```
    htmlFile << "td, th {\n";
```

```
    htmlFile << "border: 1px solid #dddddd;\n";
```

```
    htmlFile << "text-align: left;\n";
```

```
    htmlFile << "padding: 8px;\n";
```

```
    htmlFile << "}\n";
```

```
    htmlFile << "tr:nth-child(even) {\n";
```

```
    htmlFile << "background-color: #dddddd;\n";
```

```
    htmlFile << "}\n";
```

```
    htmlFile << "</style>\n";
```

```
    htmlFile << "</head>\n";
```

```

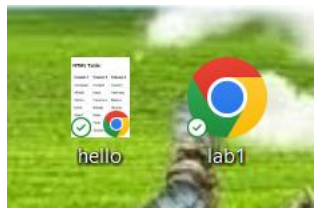
htmlFile << "<body>\n";
htmlFile << "<h2>HTML Table</h2>\n";
htmlFile << "<table>\n";
htmlFile << "<tr>\n";
for (int j = 0; j < cols; j++) {
    htmlFile << "<th>Column " << j + 1 << "</th>\n";
}
htmlFile << "</tr>\n";
for (int i = 0; i < rows; i++) {
    htmlFile << "<tr>\n";
    for (int j = 0; j < cols; j++) {
        htmlFile << "<td>" << data[i][j] << "</td>\n";
    }
    htmlFile << "</tr>\n";
}
htmlFile << "</table>\n";
htmlFile << "</body>\n";
htmlFile << "</html>\n";
htmlFile.close();

cout << "HTML table created and saved to desktop." << endl;

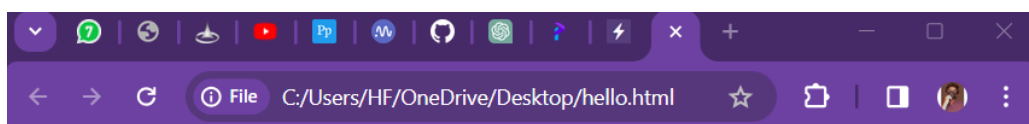
return 0;
}

```

- Generated Html File



- Generated Html Table



### HTML Table

Column 1	Column 2	Column 3
Company	Contact	Country
Alfreds	Maria	Germany
Centro	Francisco	Mexico
Ernst	Roland	Austria
Island	Helen	UK
Laughing	Yoshi	Canada
Magazzini	Giovanni	Italy