



**COMSATS UNIVERSITY ISLAMABAD, ATTOCK
CAMPUS**

**DEPARTMENT OF COMPUTER SCIENCE
LAB TERMINAL**

Submitted to	: Mr. Bilal Haider
Submitted by	: AQSA BIBI (FA20-BCS-033) MUNAZA (FA20-BCS-077)
Subject	: Compiler Construction
Section	: BCS 7“A”
Date	: 28-12-2023

Question No # 3

Functionalities along with screenshots (function code +output)?

Answer:

Functionalities:

```
}  
  
private void Form1_Load(object sender, EventArgs e)  
{  
    // Set up DataGridView  
    dataGridView1.AllowUserToAddRows = false;  
    dataGridView1.ReadOnly = true;  
    dataGridView1.AutoSizeColumnsMode = DataGridViewAutoSizeColumnsMode.Fill;  
}
```

```
1 reference  
private void button1_Click(object sender, EventArgs e)  
{  
    using (OpenFileDialog openFileDialog = new OpenFileDialog())  
    {  
        openFileDialog.Filter = "CSV files (*.csv)|*.csv|All files (*.*)|*.*";  
  
        if (openFileDialog.ShowDialog() == DialogResult.OK)  
        {  
            // Display selected file path  
            txtFilePath.Text = openFileDialog.FileName;  
  
            // Parse and load CSV data into DataGridView  
            LoadCsvData(openFileDialog.FileName);  
        }  
    }  
}
```

```

private void LoadCsvData(string filePath)
{
    // Clear existing data
    dataGridView1.DataSource = null;

    // Create a DataTable to hold the CSV data
    DataTable dataTable = new DataTable();

    try
    {
        using (TextFieldParser parser = new TextFieldParser(filePath))
        {
            parser.Delimiters = new string[] { "," };

            // Read column headers
            string[] headers = parser.ReadFields();

            // Create columns in DataTable based on headers
            foreach (string header in headers)
            {
                dataTable.Columns.Add(header);
            }

            // Read data and fill DataTable
            while (!parser.EndOfData)
            {
                string[] fields = parser.ReadFields();
                dataTable.Rows.Add(fields);
            }
        }
    }
}

```

```

    // Bind DataTable to DataGridView
    dataGridView1.DataSource = dataTable;
}
catch (Exception ex)
{
    MessageBox.Show($"Error: {ex.Message}", "Error", MessageBoxButtons.OK, MessageBoxIcon.Error);
}

```

Output



The screenshot shows the same Windows application window titled "Form1". The background is dark teal. The title "CSV PARSER IN COMPILER CONSTRUCTION" is at the top. Below it is a table with 7 columns and 7 rows. The first row is highlighted in blue. Below the table is a white horizontal bar.

	Year	Industry_aggrega	Industry_code_N	Industry_name_N	Units	Vari
►	2021	Level 1	99999	All industries	Dollars (millions)	H01
	2021	Level 1	99999	All industries	Dollars (millions)	H04
	2021	Level 1	99999	All industries	Dollars (millions)	H05
	2021	Level 1	99999	All industries	Dollars (millions)	H07
	2021	Level 1	99999	All industries	Dollars (millions)	H08
	2021	Level 1	99999	All industries	Dollars (millions)	H09

CSV PARSER IN COMPILER CONSTRUCTION

	Year	Industry_aggrega	Industry_code_N	Industry_name_N	Units	Vari
	2016	Level 3	EE12	Heavy and Civil...	Dollars (millions)	H19
	2016	Level 3	EE12	Heavy and Civil...	Dollars (millions)	H20
	2016	Level 3	EE12	Heavy and Civil...	Dollars (millions)	H21
	2016	Level 3	EE12	Heavy and Civil...	Dollars (millions)	H22
	2016	Level 3	EE12	Heavy and Civil...	Dollars (millions)	H23
	2016	Level 3	EE12	Heavy and Civil...	Dollars (millions)	H24