# CO Project Report

<u>Assembler and Gui</u>

1-

- We made **a c++ program** that takes a **text file** which contains **assembly** instructions as an **input** to our program.

- The c++ program then **parse** the instructions, and **converts** them into their **binary** equivalent.

- Finally the **binary** output is **written in a text file** in order to be an **input to the processor.**

2-

- To make it **easier** for the user to interact with our program. We made a **(graphical user interface)** using **c#**, then we mixed it with our c++ program.

- The (**gui**) enables the user to enter the instructions each in a line in a **rich text box.**

- When the user clicks on the **execute button**, it **invokes** the c++ program, so we have a binary text output .

- Then the **gui invokes Modelsim** to **read** the text file.

- Modelsim writes the **output** from test bench in a **text** file

- The **gui reads** the results from text file, and shows them in tables.

Test case screenshot :
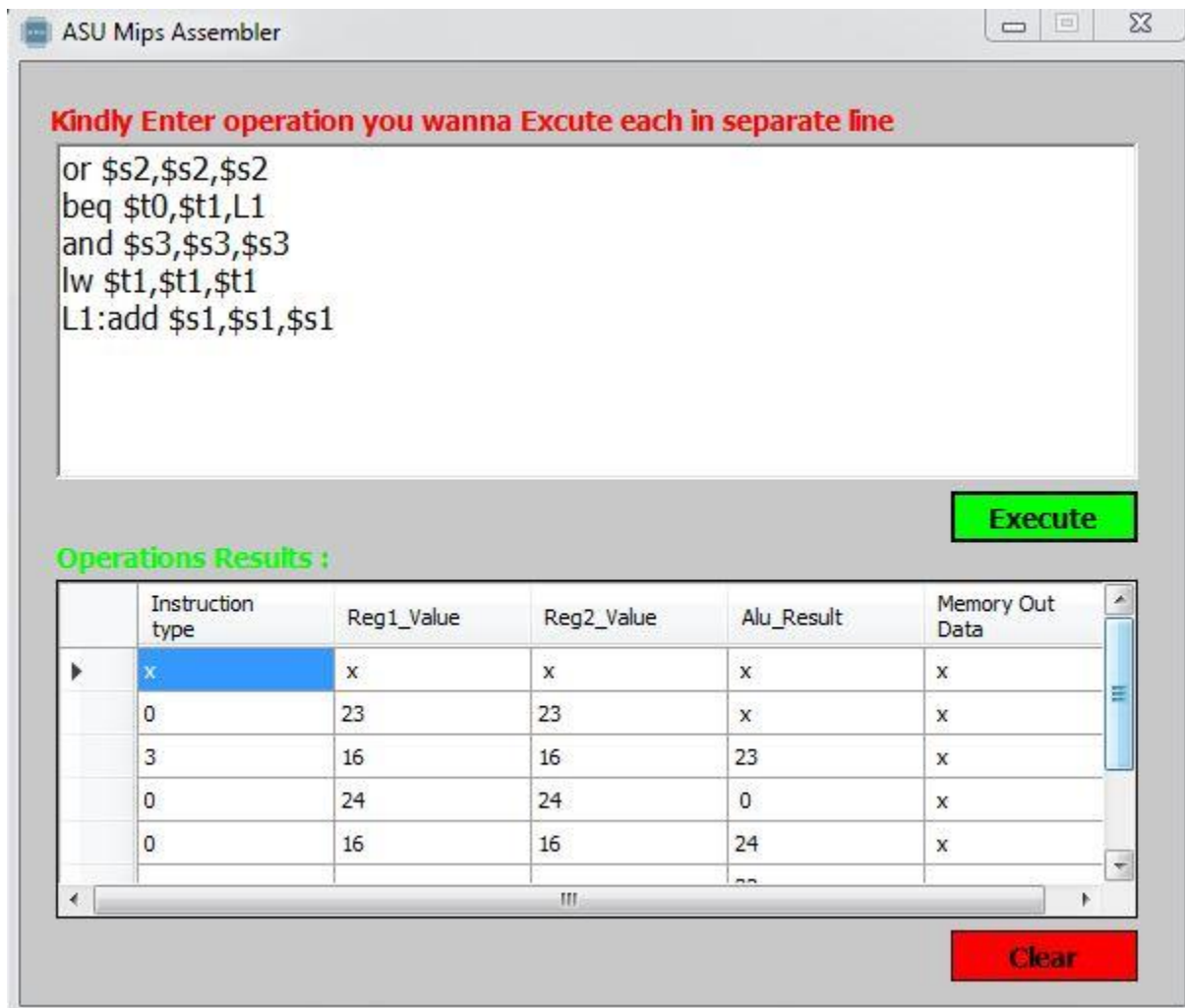
How to make the program work?

1-The three text files : binary, instructions, modelsim_results .. and

The .exe files Must be put in the same directory of the modelsim project

2-run.tcl file must be put in
C:\Modeltech_pe_edu_10.4a\win32pe_edu

3-run ASU Mips Assembler.exe.