Assembly Language Lab Notes

BY

M. Yousuf
(bsf2205789)

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Course Instructor

Mr. Ghulam Irtaza

UNIVERSITY OF EDUCATION LAHORE, MULTAN CAMPUS

DEPARTMENT OF INFORMATION SCIENCES

Lab 1: Installation of MARS and Running First Program

System Notes:
The OS I'm using is Ubuntu 22.04 and Java version is 21

Installation Steps

Step 1
Download MARS for MIPS architecture from the source below:
https://courses.missouristate.edu/KenVollmar/MARS/download.htm

Step 2:
Save the jar file at a specific directory and open terminal there.

Note: Make sure that java JDK is installed on the system by using command:
java --version

Step 3:
In terminal type the following command:
java -jar <Mars_FileName.jar>

Note: The filename of jar file may vary.
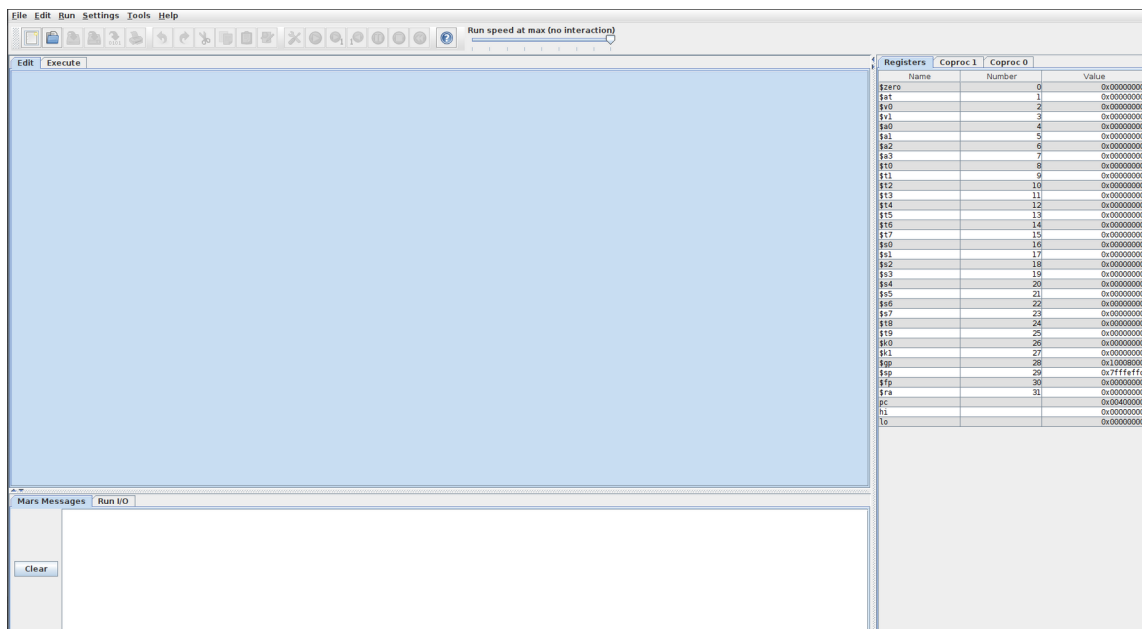
By running the command MARS interface will open:

Figure 1: MARS Start Interface

Running First Program

Step 1:

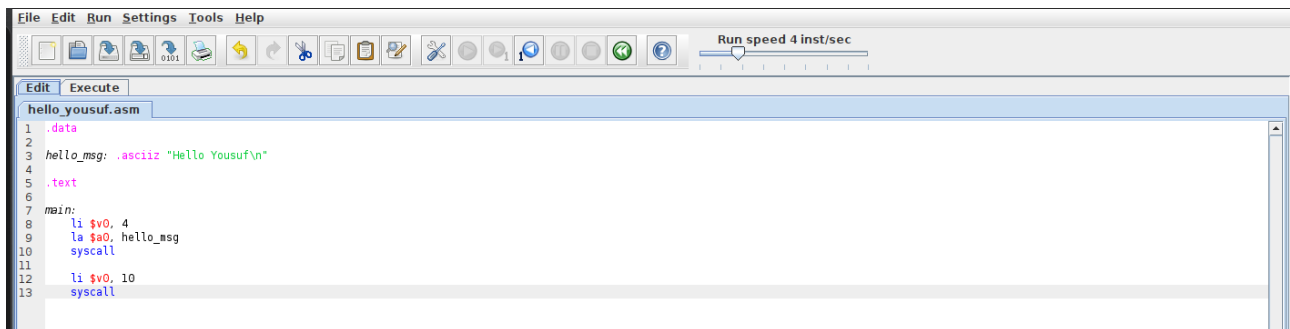Now write a simple program to print a simple message on the console "Hello Yousuf":

Figure 2: Edit view

Step 2:

Save the file by icon in menu bar:

Figure 3: Saving the file with .asm extension

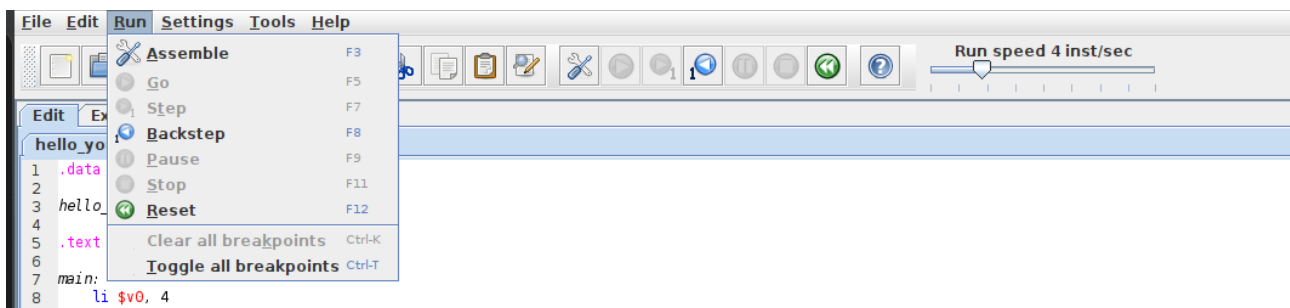**Step 3:**

Now goto Run and Select Assemble or simply press F3

Figure 4: Assembling the program

Step 4: Goto Execute tab and again from the run menu select Go or press F5

Figure 5: Exectue View

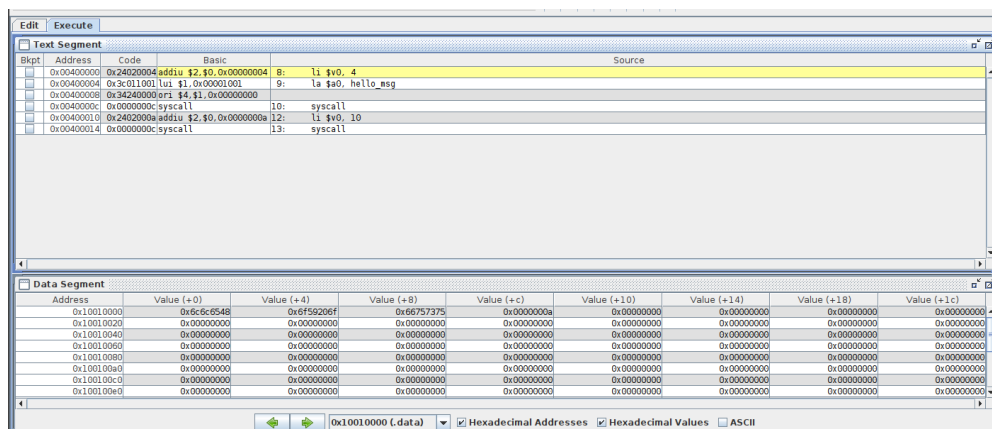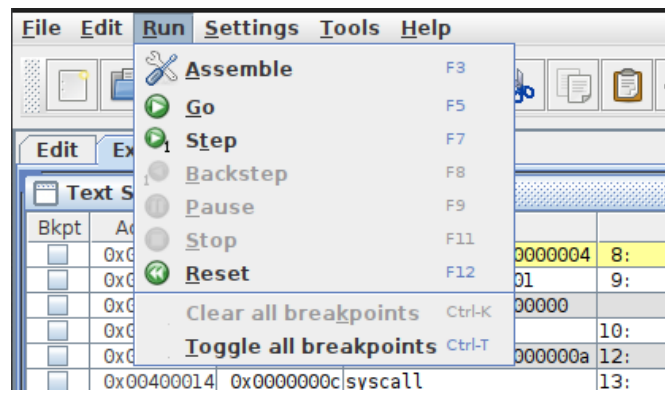*Figure 6: Running program*

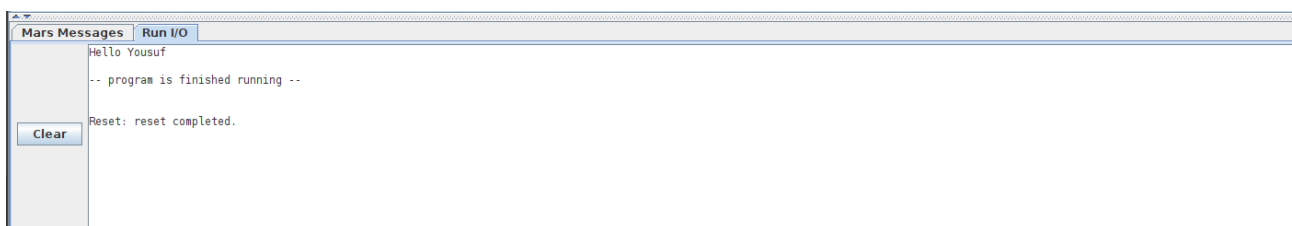The output will be in the console window below:

Figure 7: Output Console