**Guessing Game in Assembly**

This assembly language program is designed to create a very simple game where user is allowed to guess a hard coded number between 1 and 255.

This hard coded number can be replaced by a randomly generated number using a “random number generator” for EMU8086, which is bit complex because EMU8086 do not contain an instruction to do this implicitly.

Program will output if guess is higher or lower than the input number.

The code should be well commented so that it can be used by anyone who is interested in learning assembly language.

**Flow of the Program**

System will print a message saying "Please enter a valid number"

The approach used to code this program made validating so easy. Because of that such features are implemented in this program.

This system require user to enter a three digits numbers, but user can also enter 1 digit or 2 digit.

Also if users enter a value out of range such as -1, 256… system will print message: Error – Number out of range!

Finally, it asks if user wants to retry, when a correct guess is made. User can guess number in ten tries.

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Guessing Game

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Please enter a valid number: 0

Value is more

Please enter a valid number: 128

Value is more

Please enter a valid number: 170

Value if less

Please enter a valid number: 255

Value if Less

Please enter a valid number: 256

Error – Number out of range!

Please enter a valid number: -1

Error – Number out of range!

Please enter a valid number: 3333

Error – Number out of range!

Please enter a valid number: 169

You have made fine Guess!

Do you want to guess more [Y|N]