CSCI 6461 SPRING 2019 SIMULATOR VERSION 3.1

TEAM MEMBER:

PAOLA FIGUERA

KUN DUAN

GIA DO

SIMULATOR INSTRUCTION

On this version, we use new User Interface for easy of use

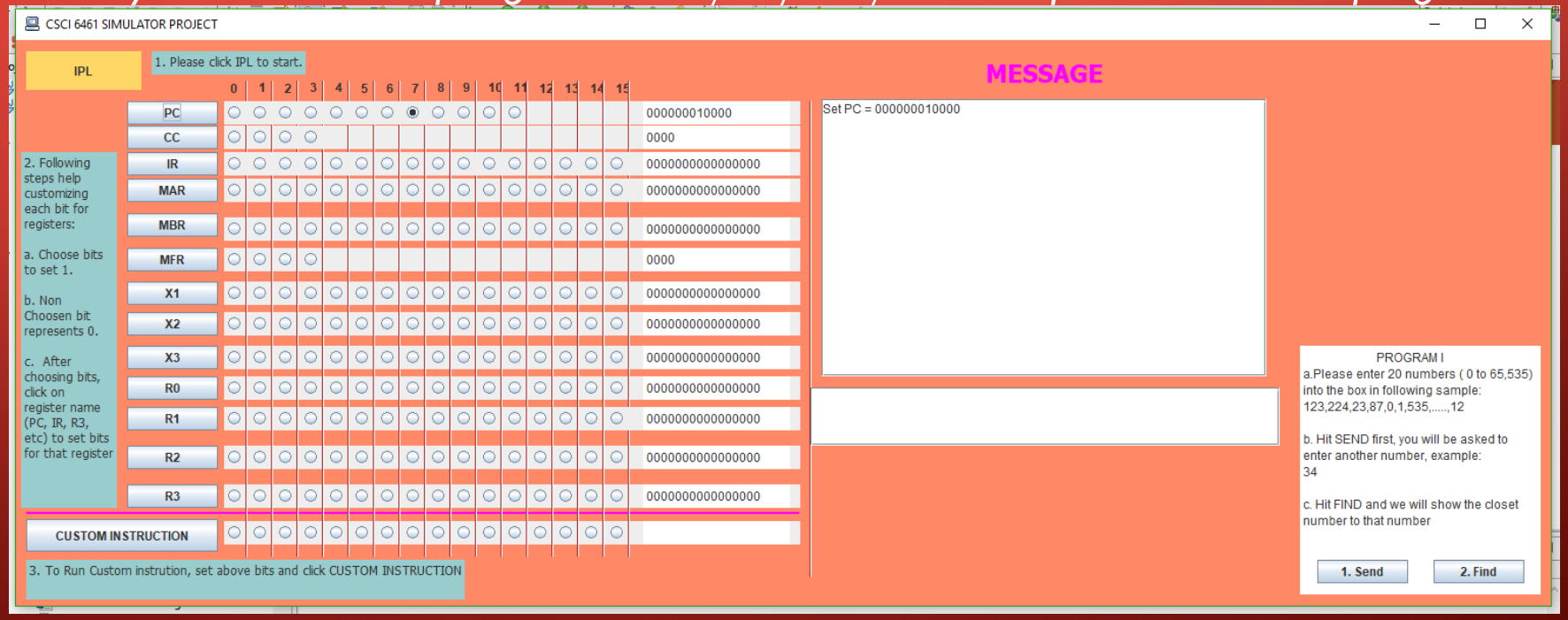
Please read through user manual to make the best out of our simulator

I. START THE PROGRAM

Please navigate to CSCI 6461 Spring 2019 3.1 and look for .Jar file

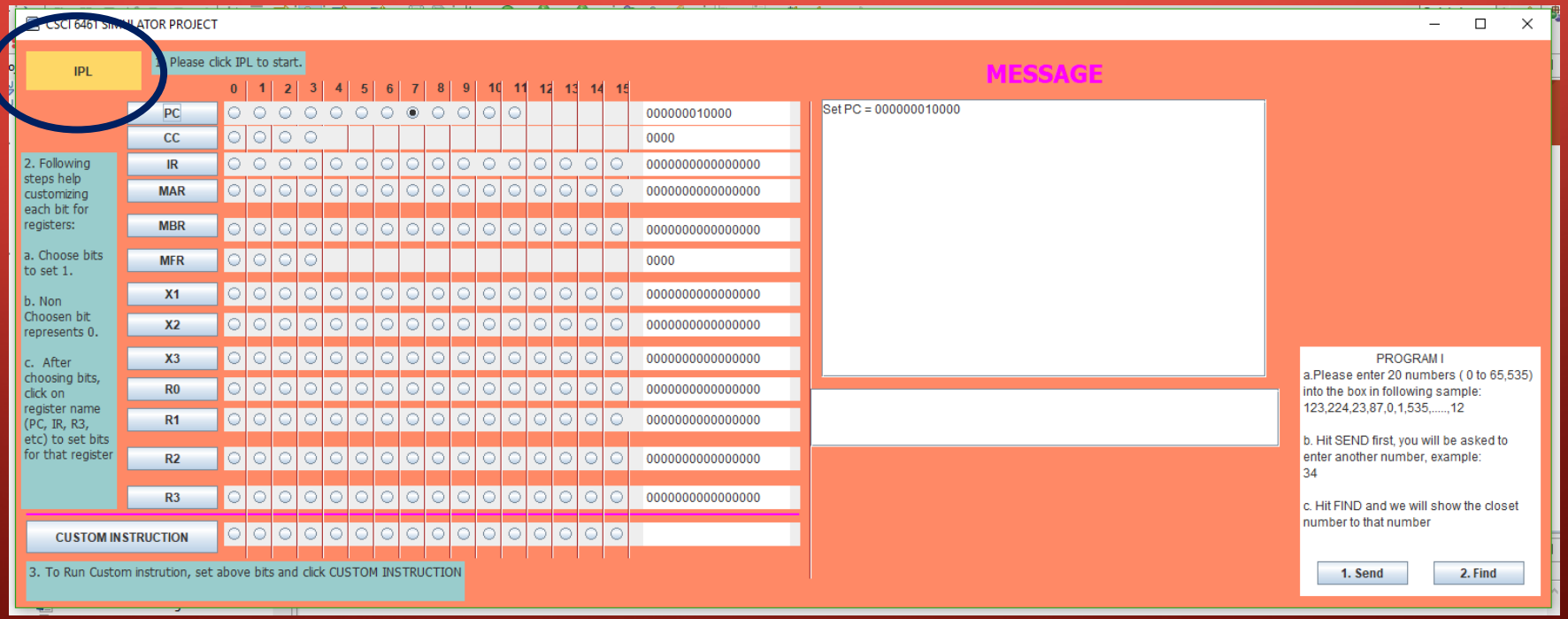
Alternative way is CSCI 6461 Spring 2019 3.1/src/GUI/FrontEnd.java and Run the program from here.

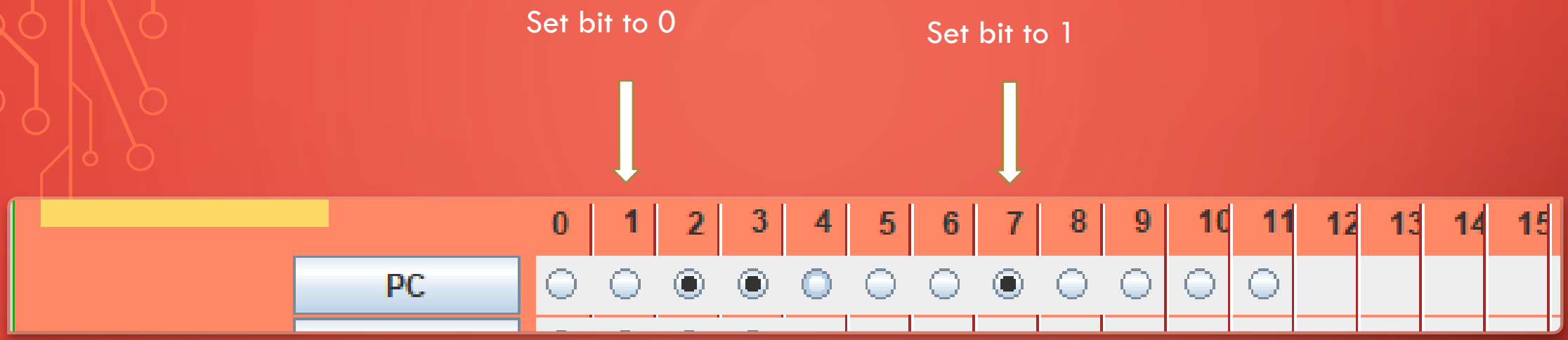
A window in appear



II. TO START THE COMPUTER

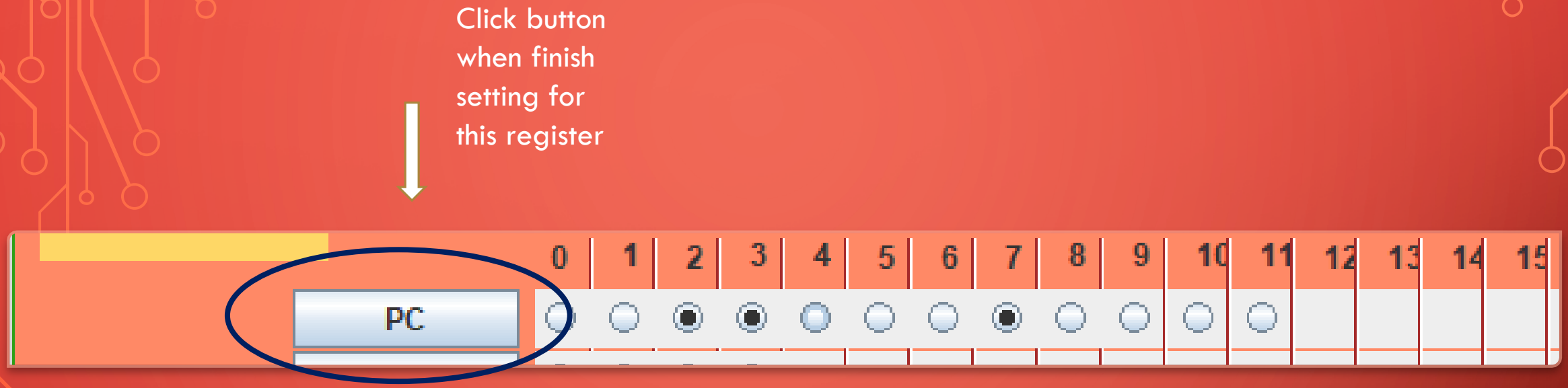
Please click on IPL to initialize all registers and memory location.





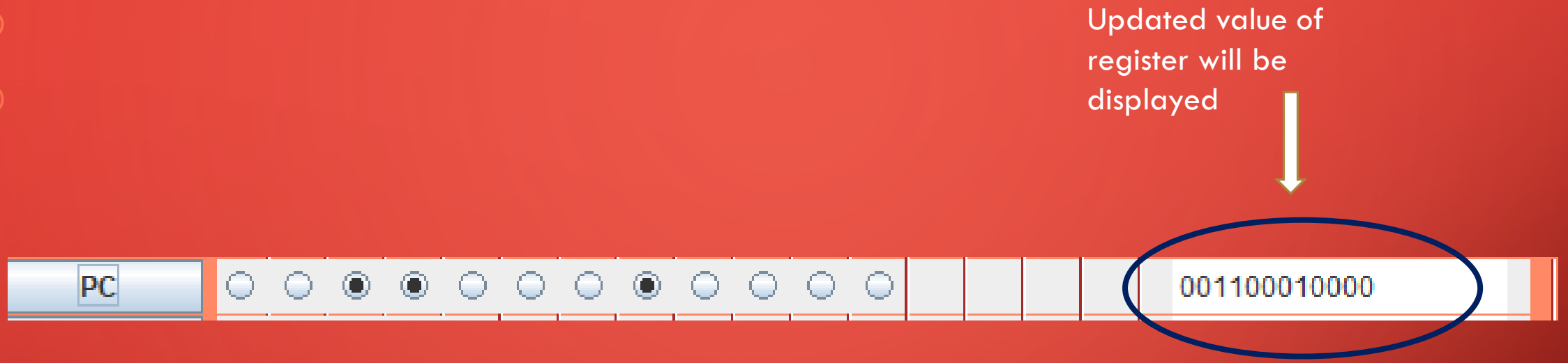
III. TO SET VALUES FOR ANY REGISTER

CHOOSE ANY BIT THAT YOU WOULD LIKE TO SET TO 1, ANY BIT THAT IS NOT CHOSEN IS CONSIDER 0



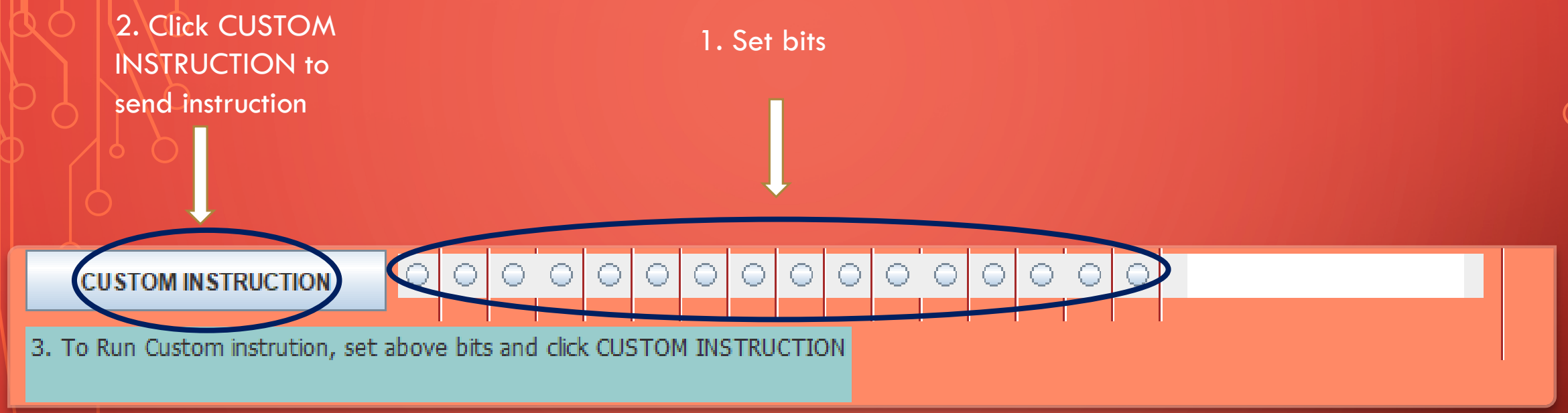
III. TO SET VALUES FOR ANY REGISTER(CONT)

HIT BUTTON OF REGISTER YOU WOULD LIKE TO SET VALUE



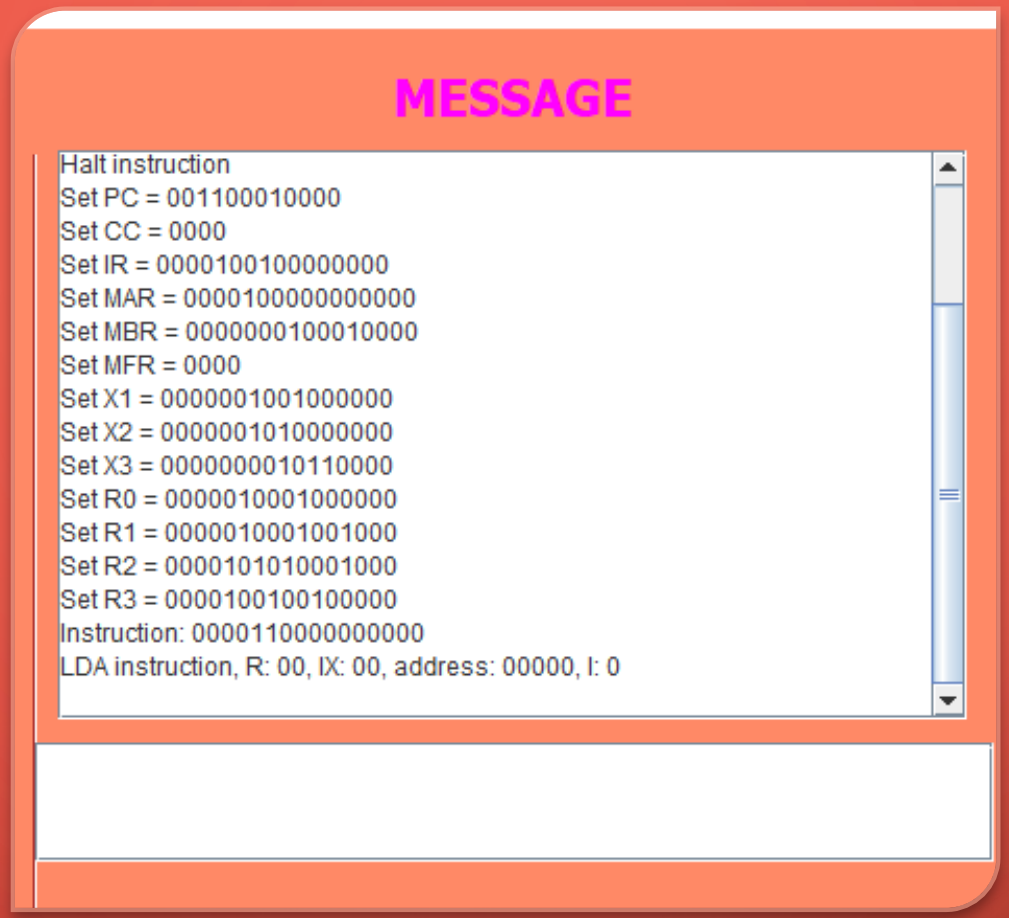
III. TO SET VALUES FOR ANY REGISTER(CONT)

The updated value (in binaries) will be displayed on the text box next to each line



IV. CUSTOMIZE INSTRUCTION

FOR CUSTOMIZED INSTRUCTION, PLEASE USE CUSTOM INSTRUCTION BUTTON



All instructions call, Set bit, and message will be displayed here

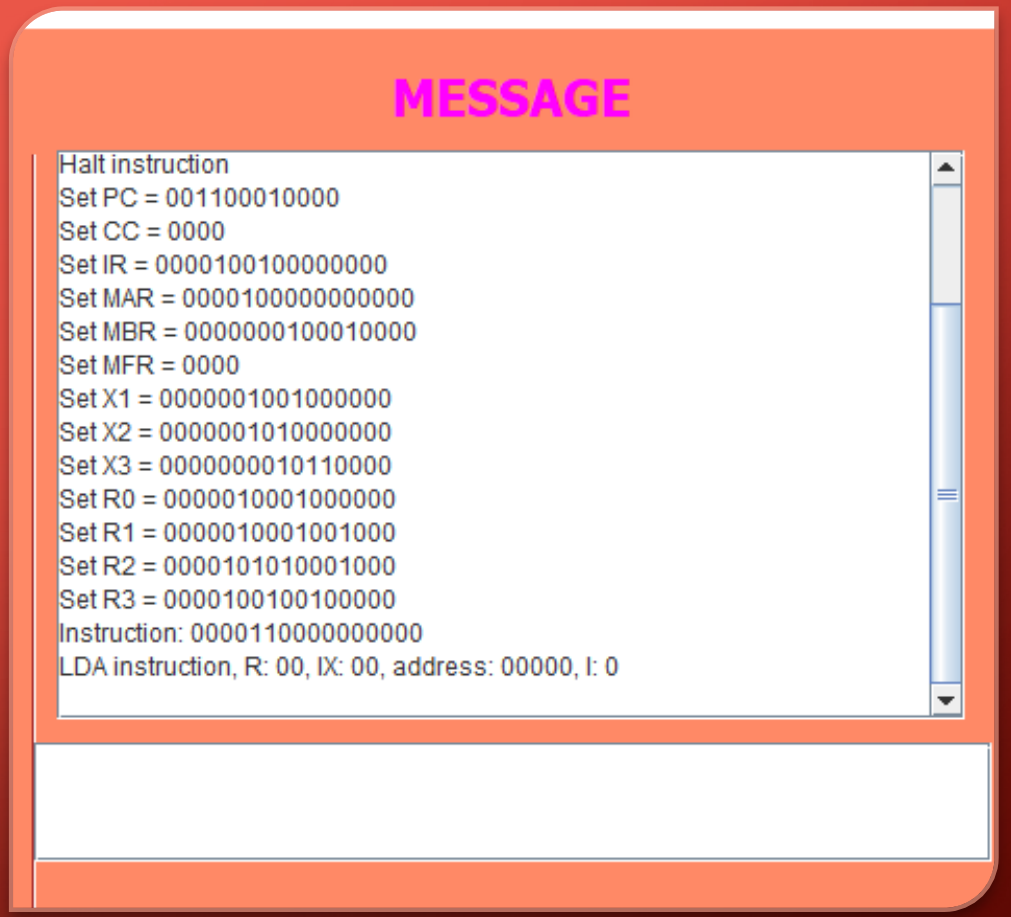
V. SCREEN OUTPUT

OUR SCROLLABLE OUTPUT SCREEN WILL SHOW WHAT IS RUNNING BEHIND THE SCENCE.

VI. KEYBOARD

- Located below screen output is editable keyboard
- Once program is loaded, you can send input to the machine through this box

Input numbers and words can be sent through this box



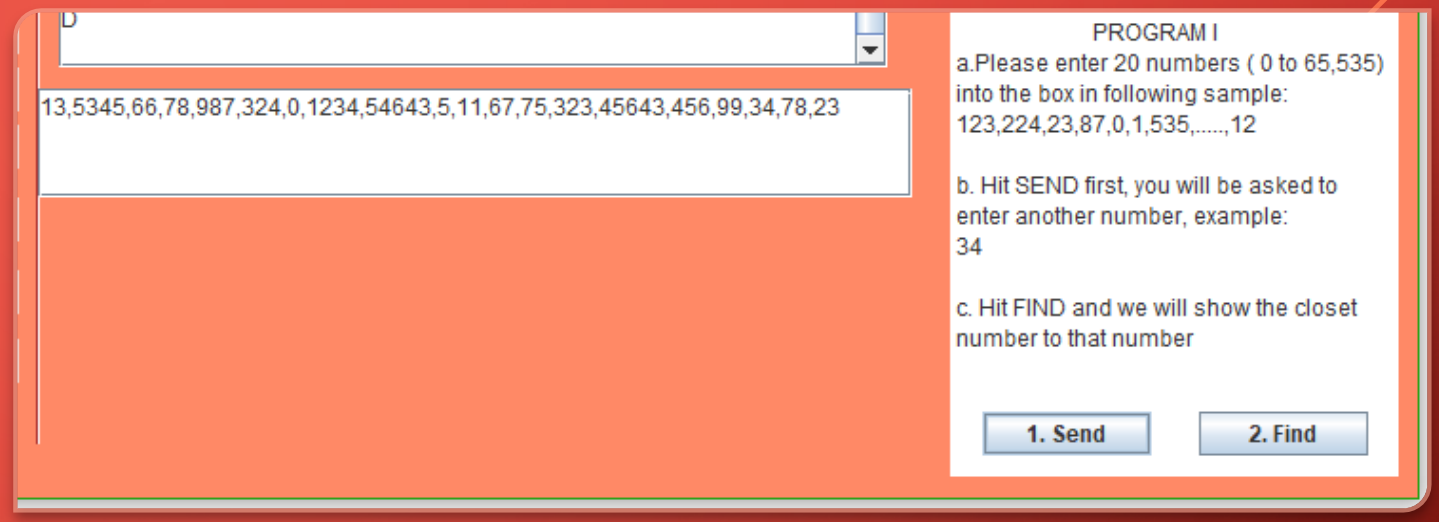
VII. PROGRAM I

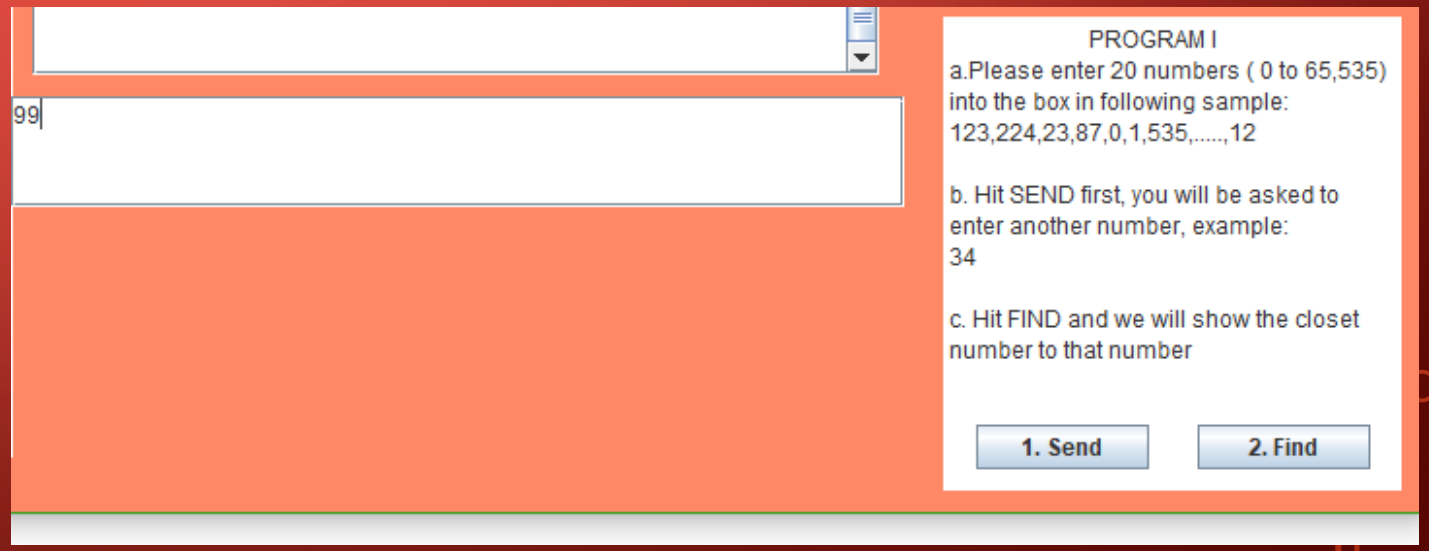
- This program read 20 numbers (0 to 65,535) and read the target number x
- It will return closest number among 20 numbers sent that is closest to x
- For example:
  13,5345,66,78,987,324,0,1234,54643,5,11,67,75,323,45643,456,99,34,78,23
- And x = 99
- Return: 99

VII. PROGRAM I (CONT.)

Follow instruction on the panel program 1

- A. Enter 20 numbers into input box, separated by comma
- B. Hit Send to save 20 numbers into memory
- C. Enter number that you want set as target number
- D. Hit Find for find the closet number





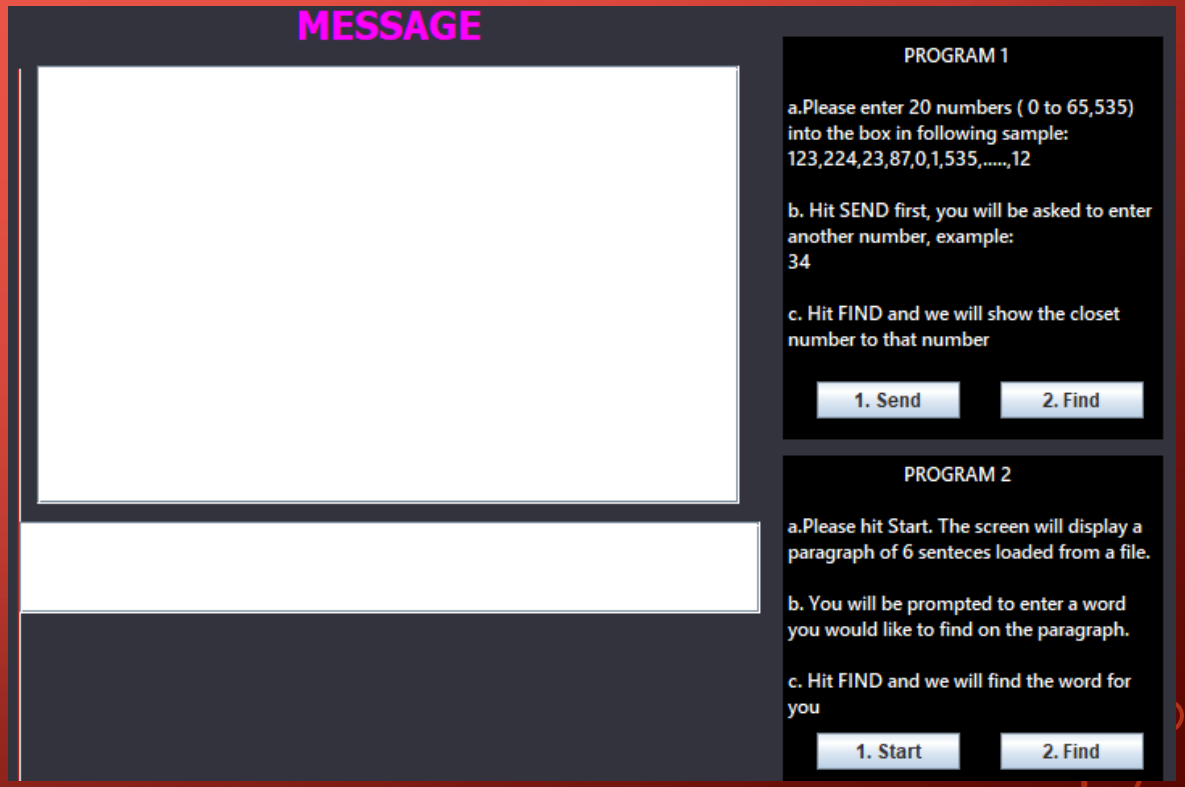
VIII. PROGRAM 2

Program 2: A program that reads a set of a paragraph of 6 sentences from a file into memory. It prints the sentences on the console printer. It then asks the user for a word. It searches the paragraph to see if it contains the word. If so, it prints out the word, the sentence number, and the word number in the sentence.

VIII. PROGRAM 2(CONT.)

To run program 2:

1. Make sure IPL button was pressed to initialize all registers and memory.
2. Press Start button on Program 2 panel.
3. A paragraph of 6 sentences will be displayed on message screen.
4. You will be prompted to enter a word you would like to find on the paragraph on the keyboard screen below the message screen.
5. After enter the word to find, hit Find button to find the word.



THANK YOU!