Computer Operation:

- 1. Double click the project02.exe file.
- 2. Click the Init button and choose program1.txt file
- 3. Click Run button to execute the program, the machine will let the user input 21 integers.
- 4. In each user input cycle, the machine will first print the words "Plz Input" into the scroll window and then pop out a window to let user input an integer.
- 5. User can input an integer between 0 to 65535 and press "OK" button.
- 6. After finishing inputting, the machine will display the closest integer into the white scroll window.
- 7. 16 buttons on the bottom side of the window can into 0 or 1.
- 8. Each LD button can be clicked to load the binary value
- 9. The Store button can store current MBR value into the memory, using current MAR value as the address.
- 10. The Load button can display the binary of address of current MAR in the memory on the MBR
- 11. Init (IPL) button starts the computer
 - a. Initializes the memory (Reading the content from the IPL.txt file)
 - b. PC is ready to be used (By clicking SS or RUN button)
- 12. If clicking console button, it will print all
- 13. If clicking SS button
 - a. The computer will run one instruction and the GUI will be updated
 - b. Continue to click the SS button to execute a single instruction
- 14. If clicking RUN button
 - a. The entire program will be executed. After finishing, the Halt light will be lighted
- 15. The Console button is to let the user see the content in the memory.

Note: sometimes the input window may show behind the GUI, click the GUI and the input window will display.