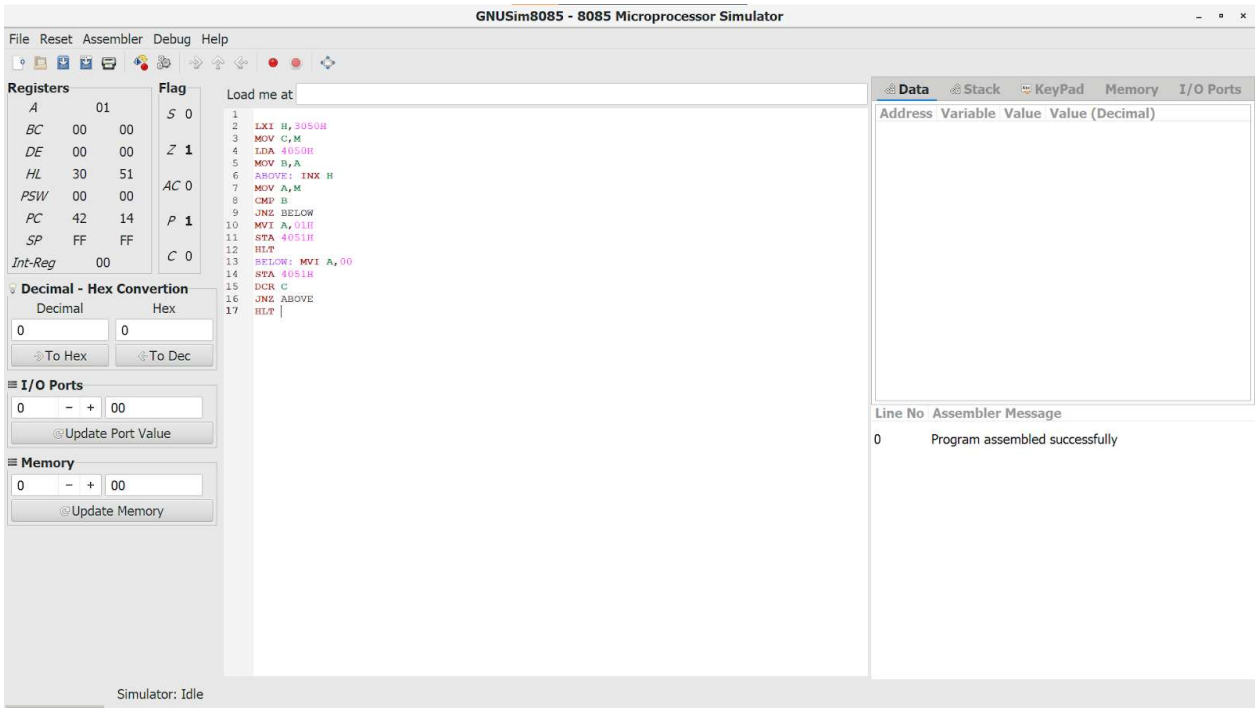
NAME : MD WASIF || ENROLL : 19UICS002
SUB : CAO LAB || ASSIGNMENT : 6

1 . Write a program to search an 8-bit number in an array.

Aim : To search a number in array of elements

Algorithm:

1) **Load H-L pair to the memory address holding the size of the array**
2) **Move it to a register that will act as a counter .**
3) **Load the element to be searched to another register.**
4) **Increment H-L par to subsequent locations containing the array elements and move it to A.**
5) **Compare each of these elements with the element to be searched ,using CMP.**
6) **If the element is the same it will generate a zero flag else not. So, we check for zero flags.**
7) **If no zero flag is generated , we store value 01 in a desired location, which indicates that our element is found and we terminate the program.**

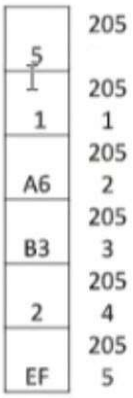


OBSERVATION:

Input:

02 3050

XX 3051



O

Output:

02	3050
01	3051

RESULT:

Thus, the program for searching an element was done and executed.

Conclusion:-

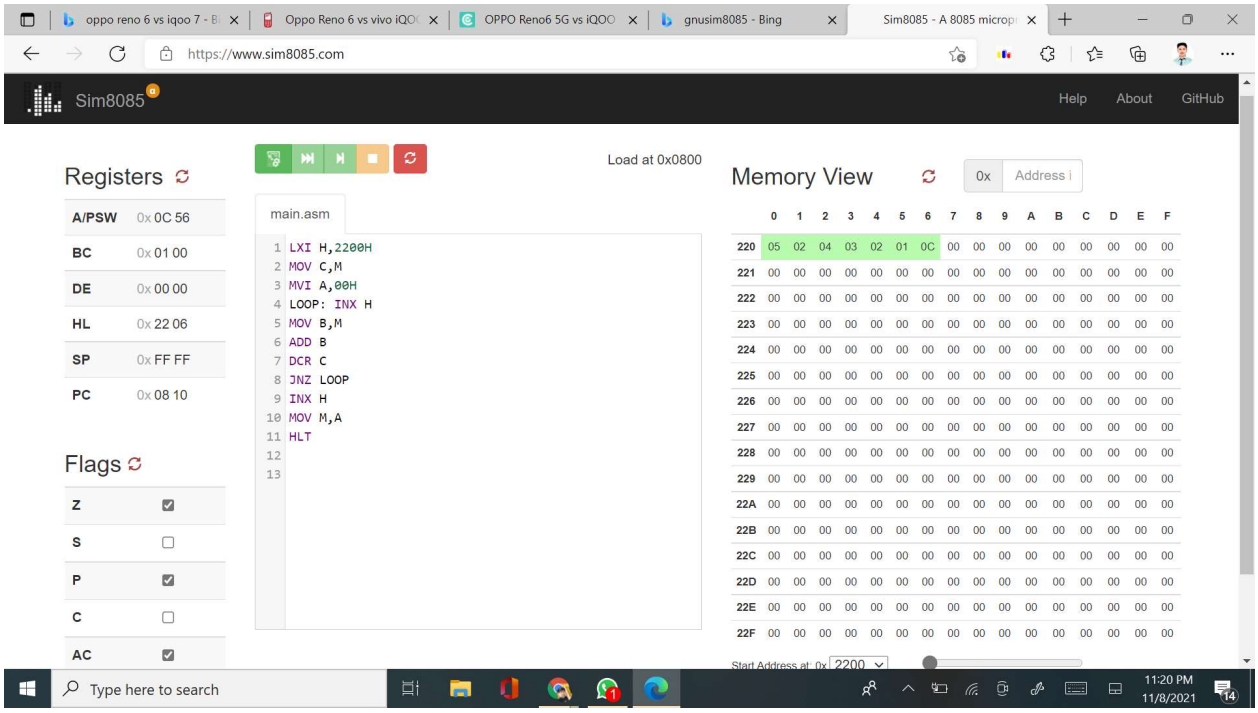
Thus, the program for searching an element was done and executed successfully.

2. Write a program to find the sum of series in an array using 8085.

Aim: program to find sum of series in an array.

Algorithm :-

1. **Load H-L pair with address.**
2. **Move the counter from memory to register.**
3. **Initialize accumulator with 00H.**
4. **Add the first element with the content of the accumulator.**
5. **Increment H-L pair.**
6. **If carry occurs, increment C, else simply decrement B.**
7. **Repeat steps 5 to 7 until B becomes zero.**
8. **Move the result to the desired location.**
9. **Terminate the program.**



Observation:-

Input:

05	2050
06	2051
03	2052
04	2053
01	2054
02	2055

Output:

0F	3050
00	3051

Conclusion :-

Thus ,the program to find the sum of elements in an array was executed.