

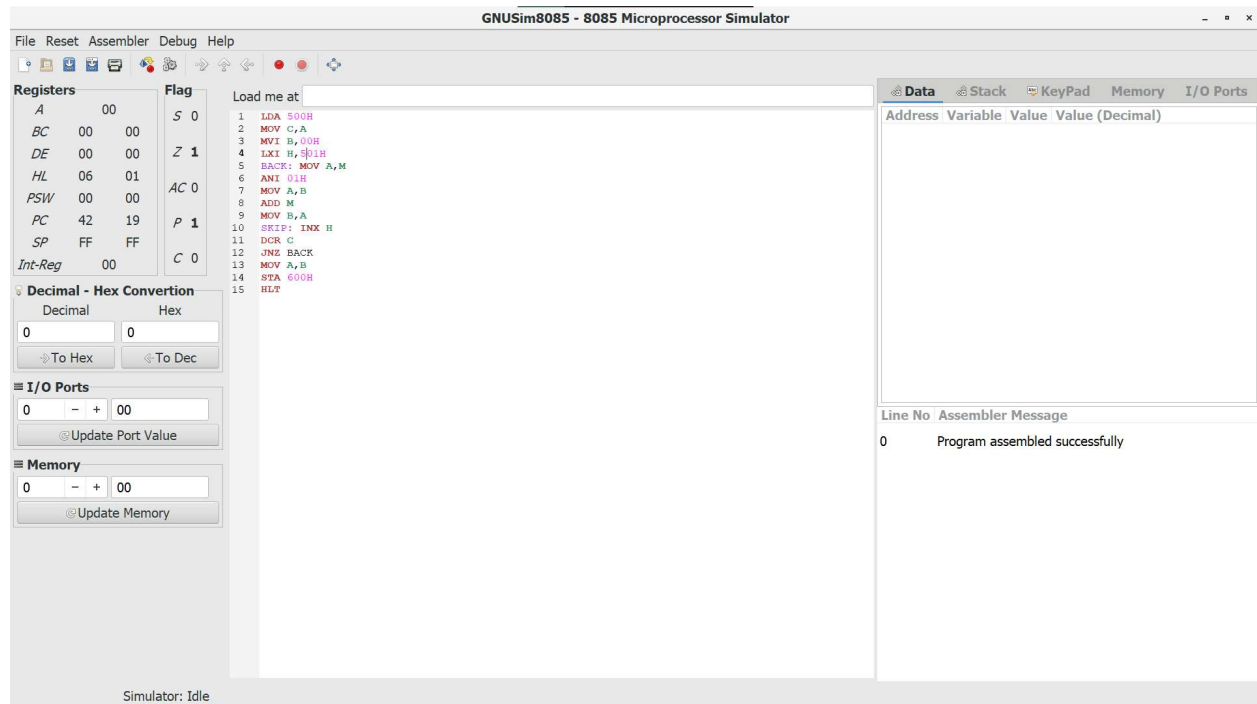
NAME : MD WASIF || enroll : 19UICS002
SUB : CAO LAB || ASSIGNMENT : 8

1. Write a program in 8085 to find sum of all odd numbers in an array

Aim : find sum of all odd numbers in an array

Algorithm:

1. Load data from offset 500 to register CL.
2. Increment the value of offset.
3. Load 00H into CH register.
4. Load 00H into AL register.
5. Load data from offset to register BL.
6. Use TEST instruction to check whether data in BL is even or odd, if zero flag is set means data is even then go to step 7 otherwise data is odd then go to step 8.
7. Jump to memory location 413H.
8. Add the data of AL and BL registers and store the result in AL register.
9. Increment the value of offset.
10. Jump to memory location 40AH if content of CX is not equal to zero otherwise go to step 11.
11. Load the data from AL register to memory location 600
12. End



Observation :

INPUT:-

500 H = 04

501 H = 15

502 H = 28

503 H = 07

504 H = 08

Result = 600 = 1C

Result:-

Thus , a program to find the sum of odd numbers in a given array was successfully executed.

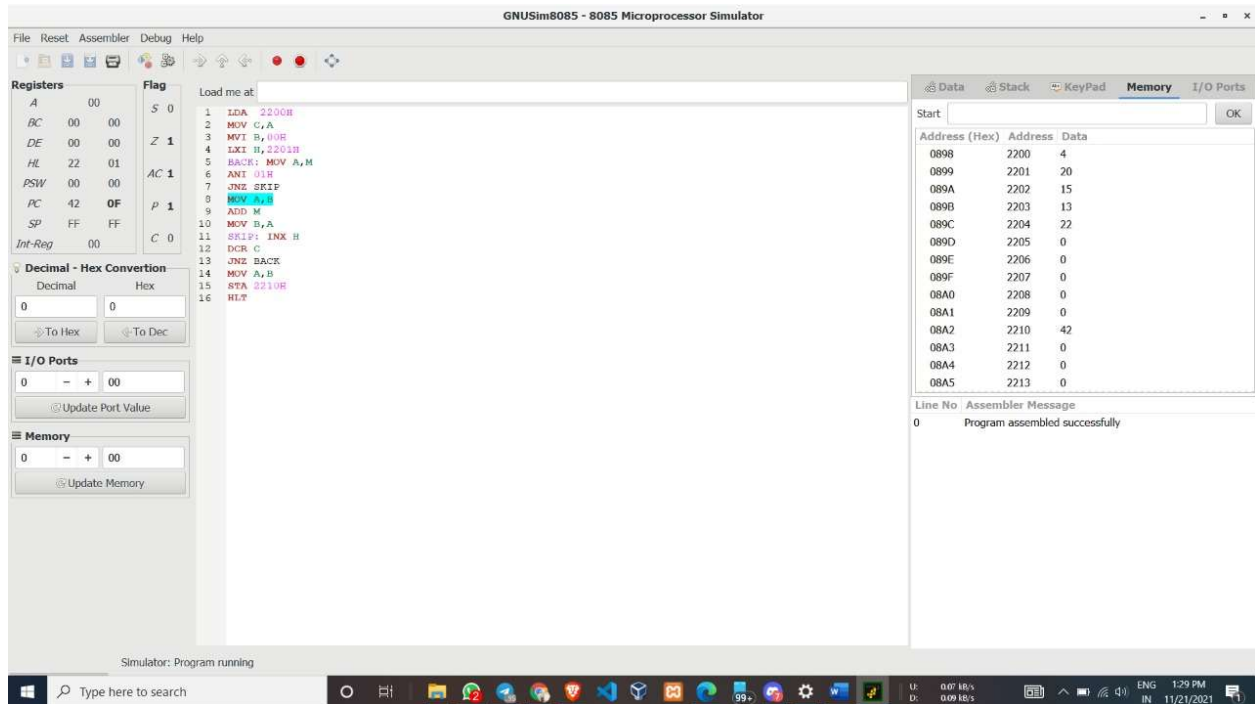
2. Write a program in 8085 to find sum of all even numbers in an array

Aim : find sum of all even numbers in an array

Algorithm:-

1. Assign 2200 to SI
2. Load data from offset SI to register CL (count) and assign 00 to register CH inc. SI by 1
3. Load data from offset SI and apply TEST with 01, if result is non zero jump to step 5

4. Add the offset data with register AL
5. Increase offset by 1
6. LOOP to step 3
7. Store the result (content of register AL) to offset 600
8. Stop



Observation:

INPUT:-

2500 H = 4H

2501 H = 20H

2502 H = 15H

2503 H = 13H

2504 H = 22H

Result = 2505 H = 20+22= 42H

Result:

Thus , a program to find the sum of even numbers in a given array was successfully executed.