

## **16-BIT ADDITION**

**EXP NO: 5**

### **AIM:**

To write an assembly language program to implement 16-bit addition using 8085 processor.

### **ALGORITHM:**

- 1) Start the program by loading a register pair with address of 1st number.
- 2) Copy the data to another register pair.
- 3) Load the second number to the first register pair.
- 4) Add the two register pair contents.
- 5) Store the result in memory locations.
- 6) Terminate the program.

## PROGRAM:

LHLD 2500

XCHG

LHLD 2502

DAD D

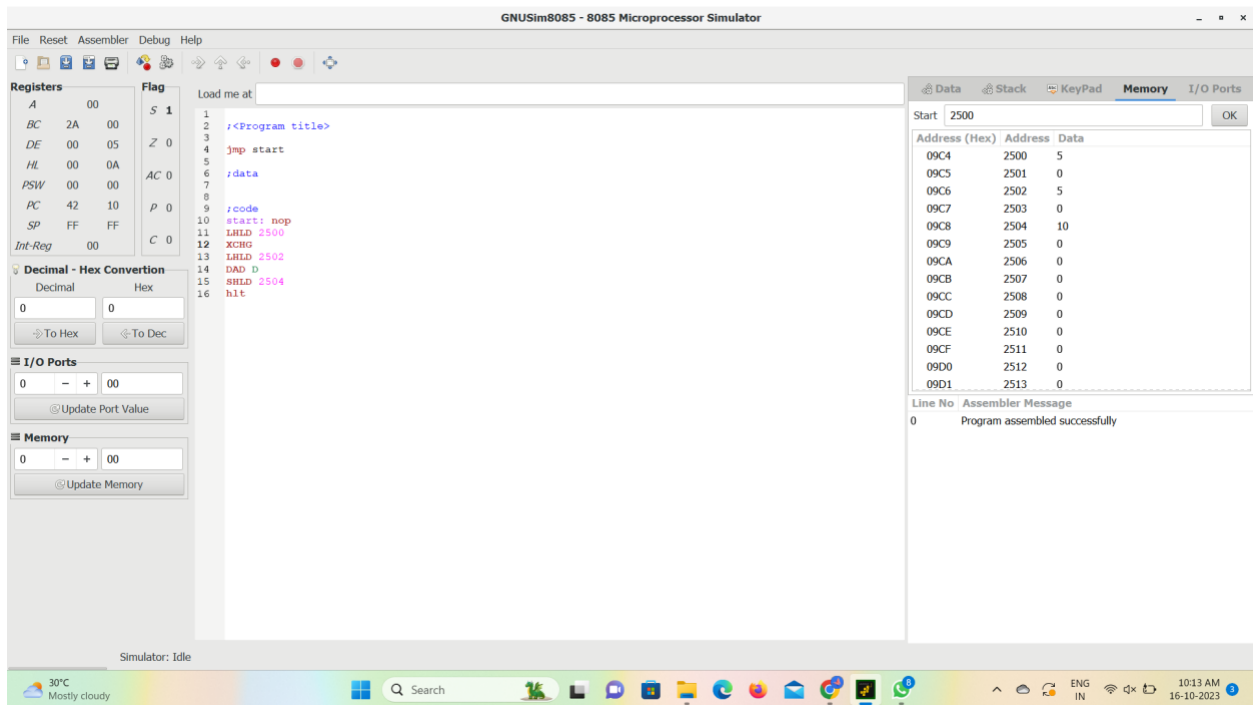
SHLD 2504

HLT

Input

Address (Hex)	Address	Data
09C4	2500	5
09C5	2501	0
09C6	2502	5
09C7	2503	0

Output



**RESULT:** Thus the program was executed successfully using 8085 processor simulator.