

16-BIT ADDITION

EXP NO: 5

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

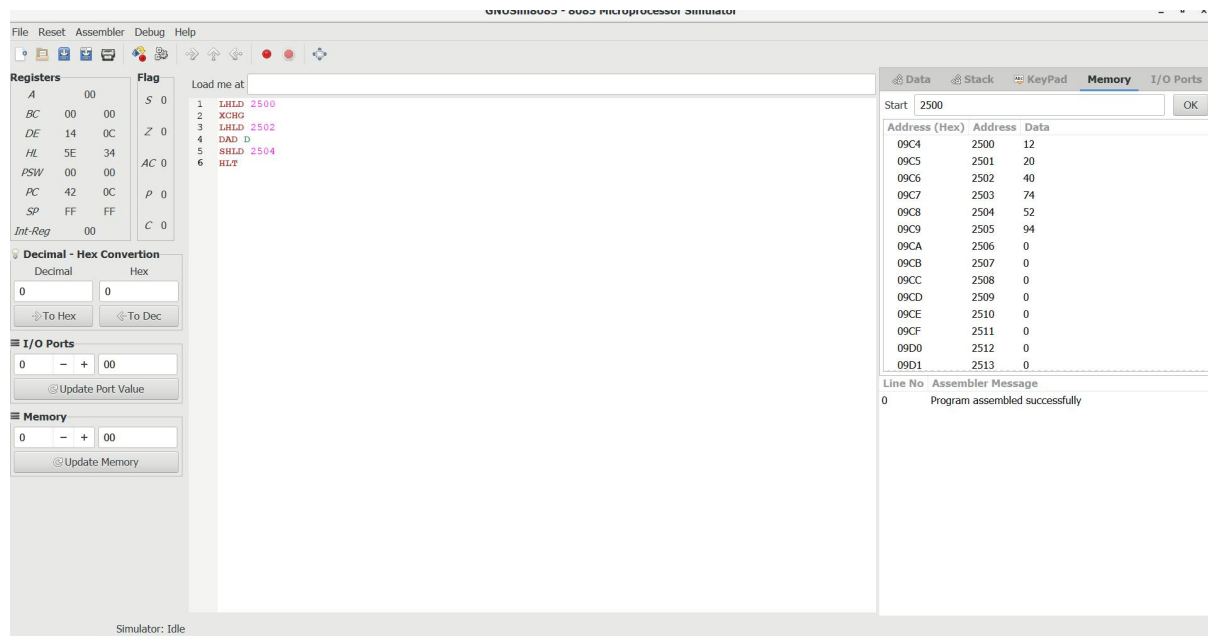
ALGORITHM:

- 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) Check for carry.
- 6) Store the value of sum and carry in memory locations.
- 7) Terminate the program.

PROGRAM:

```
LHLD 2500
XCHG
LHLD 2502
DAD D
SHLD 2504
HLT
```

INPUT\OUTPUT:



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