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

ALGORITHM:

1. Load the lower part of the first number in the B register.

2. Load the lower part of the second number in A (accumulator).

3. Add both the numbers and store.

4. Load the higher part of the first number in the B register.

5. Load the higher part of the second number in A (accumulator).

6. Add both the numbers with carrying from the lower bytes (if any) and store them at the next location.

PROGRAM :

LHLD 2500

XCHG

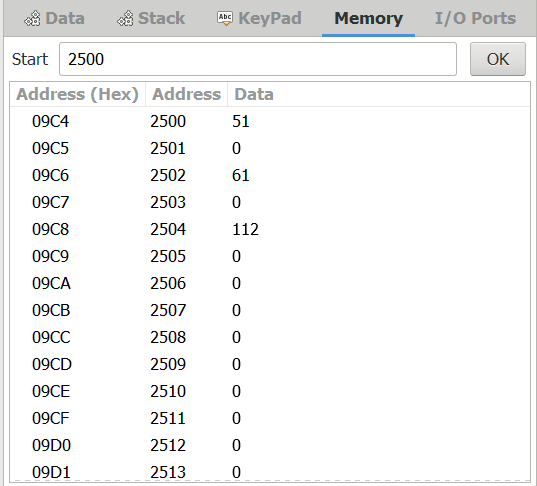
LHLD 2502

DAD D

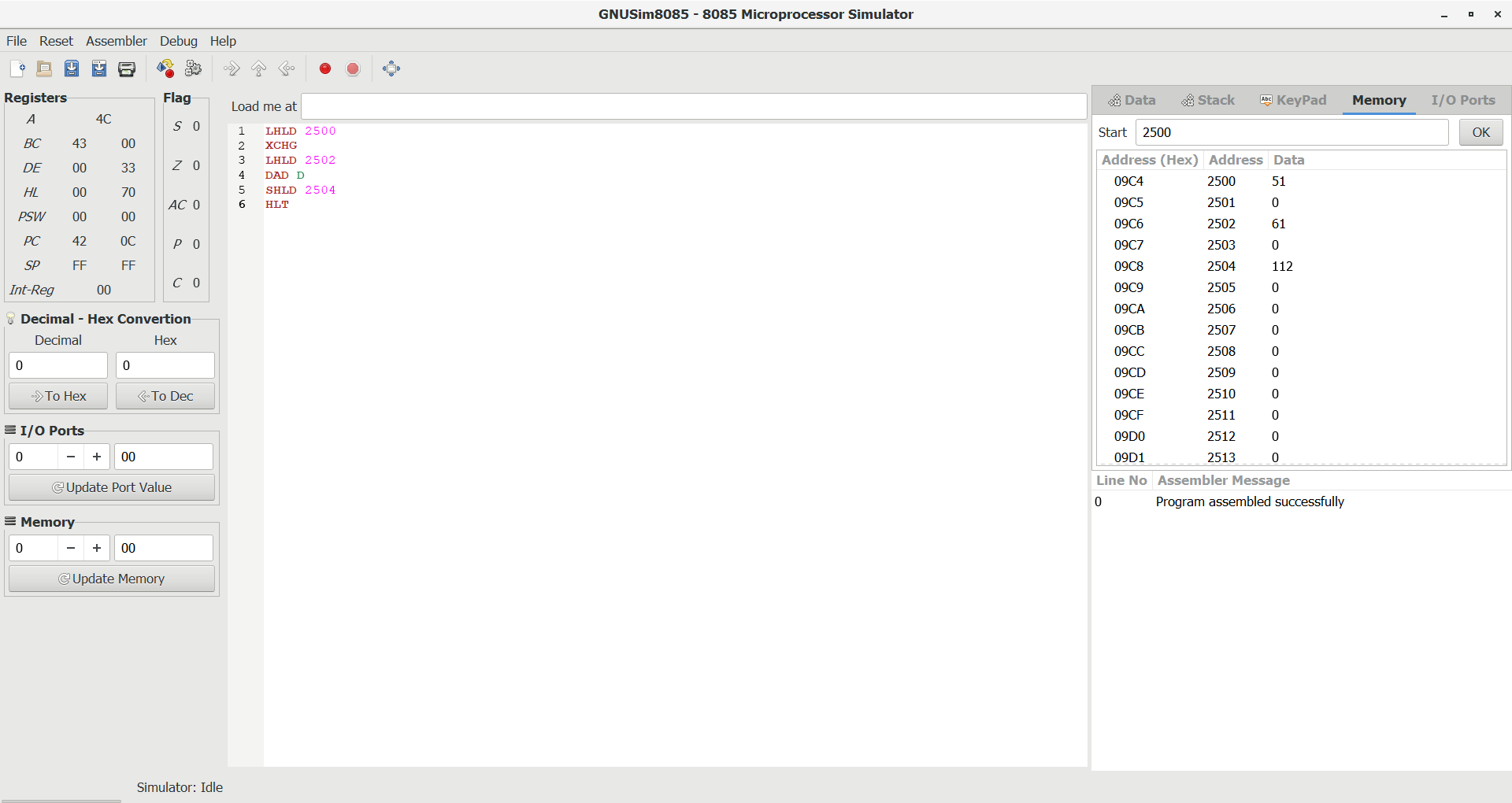
SHLD 2504

HLT

INPUT:



OUTPUT:



RESULT

Thus the program was executed successfully using 8085 processor simulator.