| 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

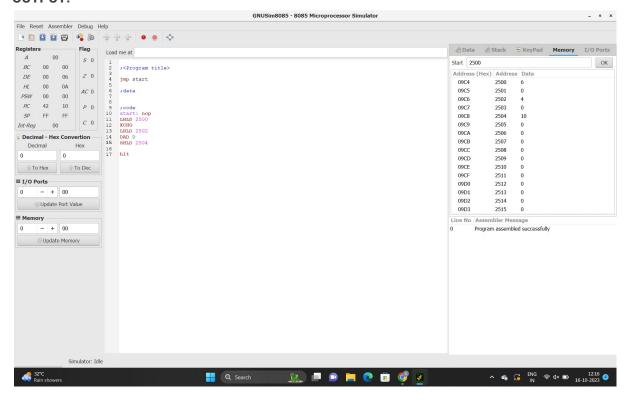
SHLD 2504

HLT

INPUT:

| Address (Hex) | Address | Data |
|---------------|---------|------|
| 09C4 | 2500 | 6 |
| 09C5 | 2501 | 0 |
| 09C6 | 2502 | 4 |
| 09C7 | 2503 | 0 |

OUTPUT:



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