

### Experiment 3

#### **(a) First number is greater than second number**

##### **ALGORITHM**

I

- Get address of 1<sup>st</sup> number in H-L pair.
- 1<sup>st</sup> number in accumulator.
- Content of H-L pair increases from 2501 to 2502 H.
- 1<sup>st</sup> number - 2<sup>nd</sup> number
- Content of H-L pair becomes 2503 H.
- Stored result in 2503 H.
- Halt

Figure 1: parta

**(b) First number is less than second number**

**ALGORITHM**

- Clear reg C to Store Sign bit
- Get the first no. from memory location.
- Get the second no from memory location.
- Subtract second no from first no.
- If carry equal one,
- then increment reg C,
- Get 2'S complement of result and store the result .
- Else
- Store the result.
- Halt.

Figure 2: partb