


Experiment No: - 7

Aim: - To perform the ascending/descending using assembly language.

| Total Marks(10) | | | | | Total Marks | DOP | Sign |
|-----------------|---|---|---|---|----------------|-----|------|
| A | B | C | D | E | | | |
| 2 | 3 | 2 | 2 | 1 | | | |
| | | | | | | | |

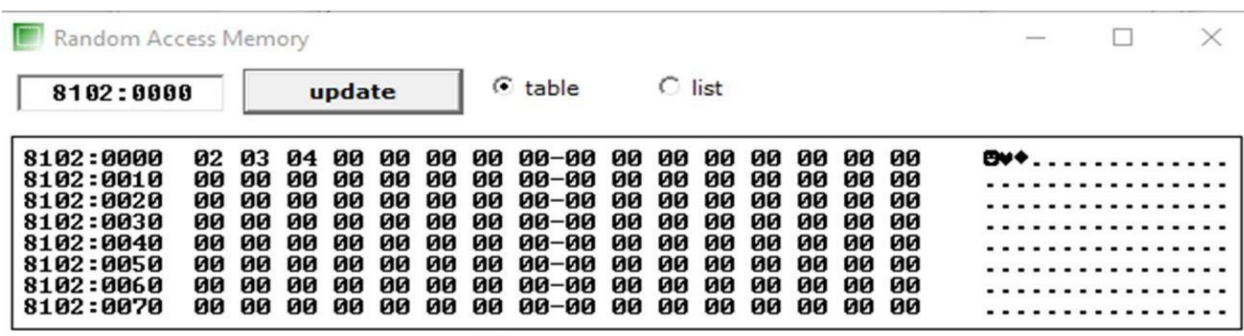
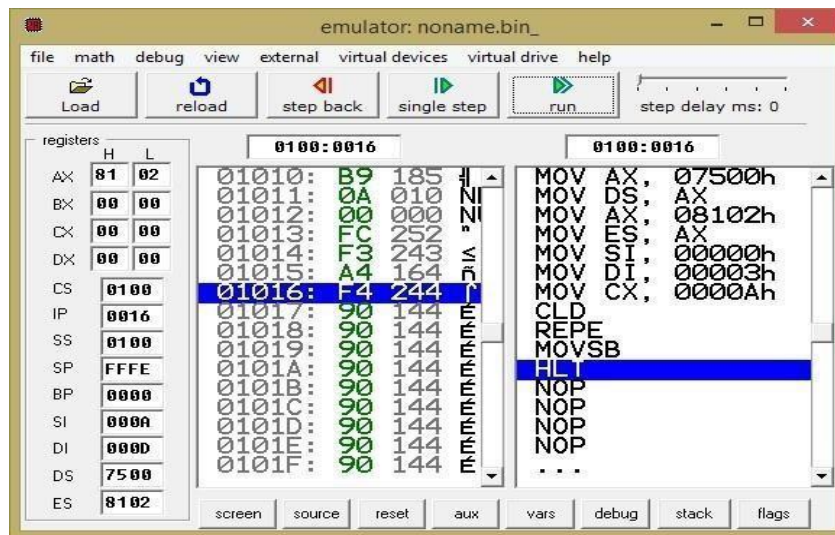
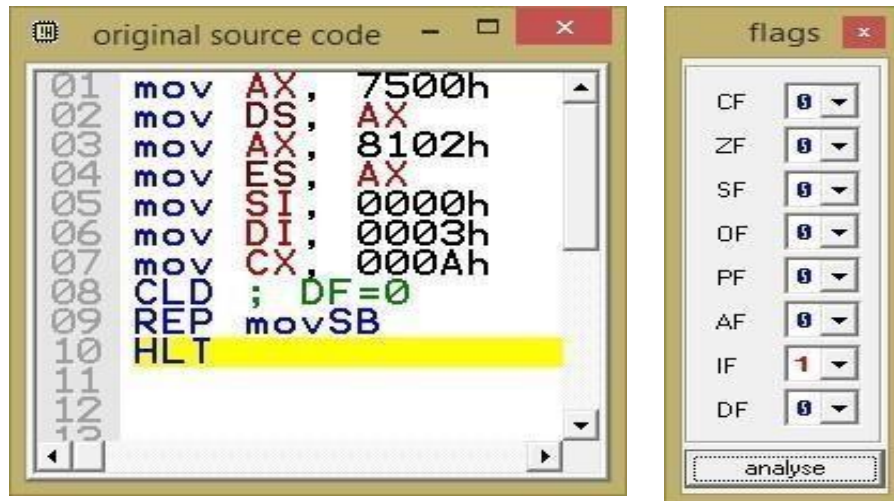
| | |
|---|---|
|  | <p style="text-align: center;">JNIESTRT'S SMT. INDIRA GANDHI COLLEGE OF ENGINEERING GHANSOLI, NAVI MUMBAI – 400 709 (Approved by AICTE New Delhi & Govt. of Maharashtra, Affiliated to University of Mumbai) Computer Engineering Department ACADEMIC YEAR: - 2023-24 (EVEN SEM)</p> |
|---|---|

Experiment No: - 8

Aim:- To transfer the block of data using string instruction.

| Total Marks(10) | | | | | Total Marks | DOP | Sign |
|-----------------|---|---|---|---|-------------|-----|------|
| A | B | C | D | E | | | |
| 2 | 3 | 2 | 2 | 1 | | | |
| | | | | | | | |

Output:



Result:

Thus the assembly language program to transfer the block of data using String Operation has been performed and executed



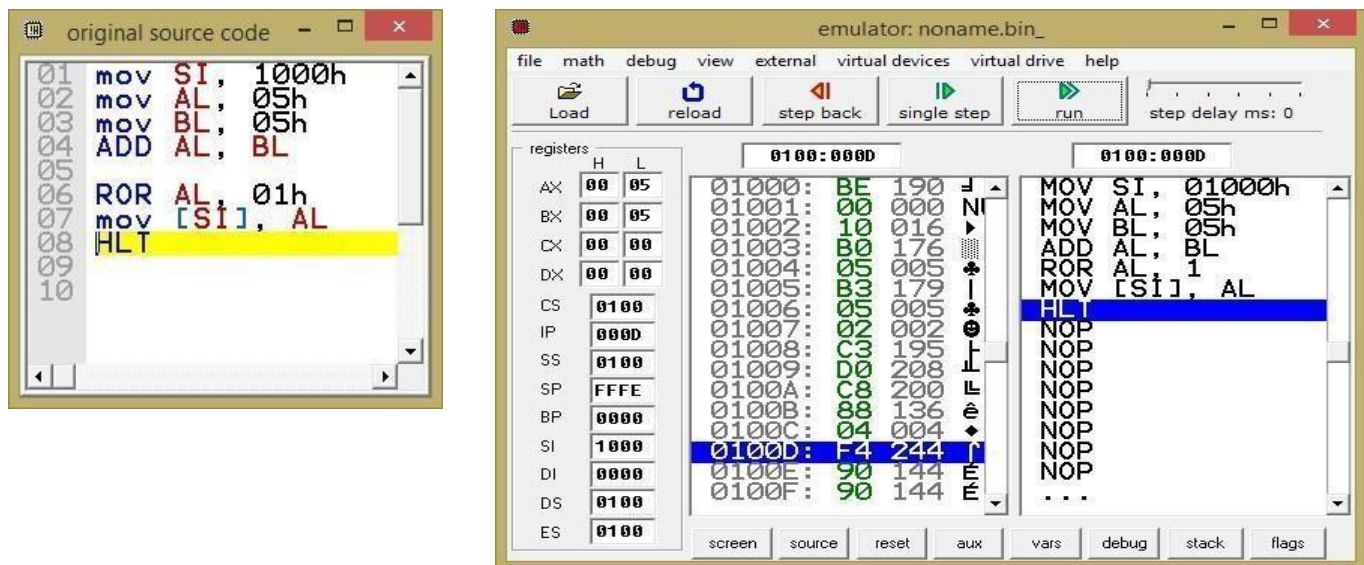
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SMT. INDIRA GANDHI COLLEGE OF ENGINEERING
GHANSOLI, NAVI MUMBAI – 400 709
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Computer Engineering Department
ACADEMIC YEAR: - 2023-24 (EVEN SEM)

Experiment No:- 9

Aim:- To find the average of two number using assembly language


| Total Marks(10) | | | | | Total Marks | DOP | Sign |
|-----------------|---|---|---|---|----------------|-----|------|
| A | B | C | D | E | | | |
| 2 | 3 | 2 | 2 | 1 | | | |
| | | | | | | | |

Output:



Result:

Thus the average of two number using assembly language program has been performed and executed

| | |
|---|--|
|  | <p style="text-align: center;">JNISTRT'S SMT. INDIRA GANDHI COLLEGE OF ENGINEERING GHANSOLI, NAVI MUMBAI – 400 709 (Approved by AICTE New Delhi & Govt. of Maharashtra, Affiliated to University of Mumbai) Computer Engineering Department ACADEMIC YEAR: - 2023-24 (EVEN SEM)</p> |
|---|--|

Experiment No:- 10

Aim:- To interface LED with 8086

| Total Marks(10) | | | | | Total Marks | DOP | Sign |
|-----------------|---|---|---|---|----------------|-----|------|
| A | B | C | D | E | | | |
| 2 | 3 | 2 | 2 | 1 | | | |
| | | | | | | | |

OUTPUT:

The screenshot displays three windows from an x86 emulator:

- LED Display:** Shows the hexadecimal value `00071` in green digits on a black background. Below the display, it says "port 199 (2 bytes)".
- Emulator Interface:** The title bar is "emulator: led.bin". It includes a menu bar (file, debug, view, virtual devices, virtual drive, help) and a toolbar with buttons for LOAD, reload, step back, single step, run, and a step delay ms: 0. The registers window on the left shows:

| | H | L |
|----|------|----|
| AX | 00 | 48 |
| BX | 00 | 00 |
| CX | 00 | 00 |
| DX | 00 | 00 |
| CS | 0100 | |
| IP | 0000 | |
| SS | 0100 | |
| SP | 0000 | |
| BP | 0000 | |
| SI | 0000 | |
| DI | 0000 | |
| DS | 0100 | |
| ES | 0100 | |

The memory window shows two segments at address 0100:0000. The left segment contains data, and the right segment contains instructions, with the instruction `OUT 0C7h, AX` highlighted.
- Original Source Code:** A window titled "original source code" showing the following assembly code:

```
01
02 #start=led_display.exe#
03
04
05
06
07 name "led"
08
09 mov ax, 1234
10 out 199, ax
11
12 mov ax, -5678
13 out 199, ax
14
15 ; Eternal loop to write
16 ; values to port:
17 mov ax, 0
18 x1:
19 out 199, ax
20 inc ax
21 jmp x1
22
23 hlt
24
25
26
```

Result:

Thus the average of two number using assembly language program has been performed and executed