

## Assignment 6

- Title : To read & display contents pointed by GDTR, LDTR & IDTR.
- Problem Statement:  
Write an ALP to read & display the table content pointed out by GDTR, LDTR & IDTR
- Objective:  
To understand how to read & display contents of GDTR, LDTR & IDTR
- Outcome:  
I will study different descriptor table in system along with different registers associated with it.
- Software Package & Hardware Apparatus:
  - 1> Core 2 duo / i3 / i5 / i7
  - 2> Linux 32/64 bit os
  - 3> gedit
  - 4> NASM, GDB

- Theory:

- 1) GDTR & IDTR:

- a) Hold 32 bit linear base address
    - b) 16 bit limit for GDTR/IDTR
    - c) The segments are global to all system tasks.

- 2) LDTR & TR

- a) Hold 16 bit selector for LDT descriptor & TSS
    - b) LDT & TSS segments are defined by selector values stored in the system segment registers.

- Algorithm:

- 1) START
  - 2) Store values of GDTR, LDTR, IDTR & TR in separate memory locations.
  - 3) Display contents stored in memory locations.
  - 4) STOP



- Test Cases:

Input	Expected Output	Actual output
1) GDTR: 1F39000:007F IDTR: FF56B000:0FFF LDTR: 0000 MSW: 8005FFFF TR : 0040	GDTR: 1F39000:007F IDTR: FF56B000:0FFF LDTR: 0000 MSW: 8005FFFF TR : 0040	Yes

- Conclusion:

We have studied different descriptor tables in system & also different registers associated with it.