

## PRACTICAL – 31

**AIM:** Design an 8086 microprocessor based system with input device getting input from memory address starting from 2000 h to 2009 h. Three LEDs (common cathode): LED-1(Green) at D0 bit, LED-2 (Yellow) at D3 bit and LED-3 (Red) at D6 bit of the output device connected at I/O mapped address 01h. Write an assembly program to take data from input device,

Glow LED-1 ; if data <=50H

LED-2 ; if 50H >data<=A0H

LED-3; if data>A0H.

Take data from input device at every 10 ms time.

### **CODE:**

```
org 100h
```

```
mov cx,03h
```

```
mov [2000h],45h
```

```
mov [2001h],10h
```

```
mov [2002h],51h
```

```
mov SI,2000h
```

```
ll:
```

```
cmp [SI],50h
```

```
js digit
```

```
cmp [SI],0A0h
```

js Digit1

mov ax,100

out 199,ax

inc SI

loop 11

digit:

inc SI

mov ax,1

mov 199,ax

loop 11

digit1:

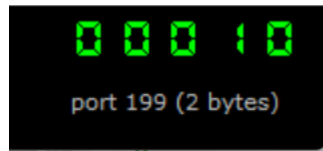
inc SI

mov ax,10

out 199,ax

loop 11

ret

**OUTPUT:**

**CONCLUSION:** In this practical we learnt to take data from input device.