## Interfacing Interrupt with 8051

**LAB 07**



## Spring 2022 CSE307L MBSD Lab

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“On my honor, as student of University of Engineering and Technology, I have neither given nor received unauthorized assistance on this academic work.”

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Submitted to: **Prof: Aber Irfan sab** August 02, 2022

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**Task:**

Write a program, there are two buttons for interrupts if we press one button up-counting is started and the second button press the seven segment number is paused.

# Code:

#include <reg51.h> #include <stdio.h>

int number = 0; sbit OS = P3^0; int i =0;

void ext0() interrupt 0

{

TR0 = 1;

}

void ext1() interrupt 2

{

TR0 = 0;

}

void timer() interrupt 1

{

i++;

if(i ==19)

{

OS = ~OS;

number = (number +1)%10; i = 0;

TH0 = 0x3C; TL0 = 0xAF;

}

}

void init()

{

TMOD = 0x1; EA = 1;

ET0 = 1;

EX0 = 1;

EX1 = 1;

IT1 = 1;

IT0 = 1; TH0 = 0x3C;

TL0 = 0xAF;

}

void main(void)

{

init(); while (1)

{

P2 = number;

}

}

# Output / Graphs / Plots / Results:

## Schematic: