University of Engineering and Technology, Peshawar

Department of Computer Systems Engineering.

Course : CSE-303 Microprocessor Based System Design

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Section		A
Batch		21 (Spring_2022)
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Task 01

A. Create a delay of 20msec

B. Turn ON an LED for 12msec and then turn OFF for 8msec. Do it continuously.

Verify the two tasks on Proteus using an oscilloscope.

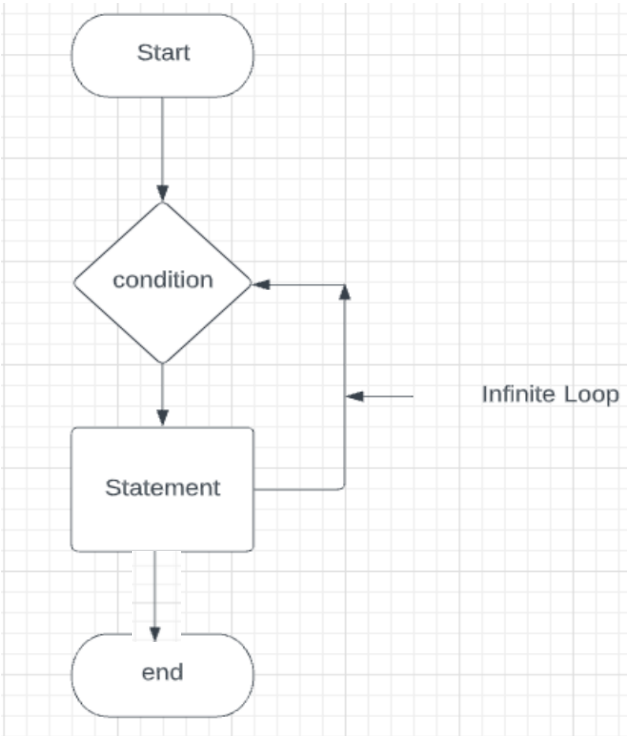
Task 01 (A)

Create a delay of 20msec

Source Code

```
#include <reg51.h>
#include <stdio.h>
void Causing_Delay(unsigned int mSec){
    int i, j;
    for(i = 0 ; i < mSec; i++){
        for(j = 0; j < 257; j++);
    }
}
void main(void){
        Causing_Delay(20);
        Causing_Delay(10);
}
```

Flow Chart



Task 01_b

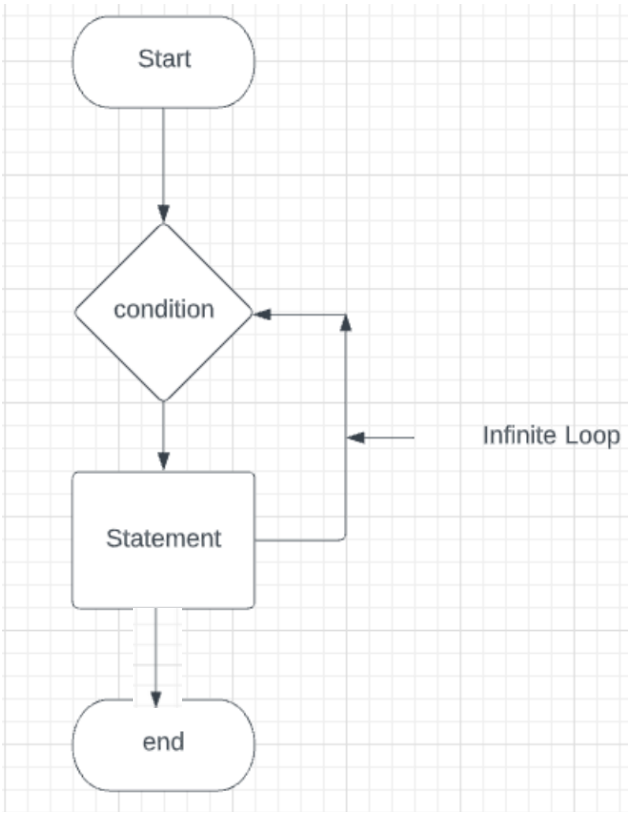
Turn ON an LED for 12msec and then turn OFF for 8msec. Do it continuously.

Source Code

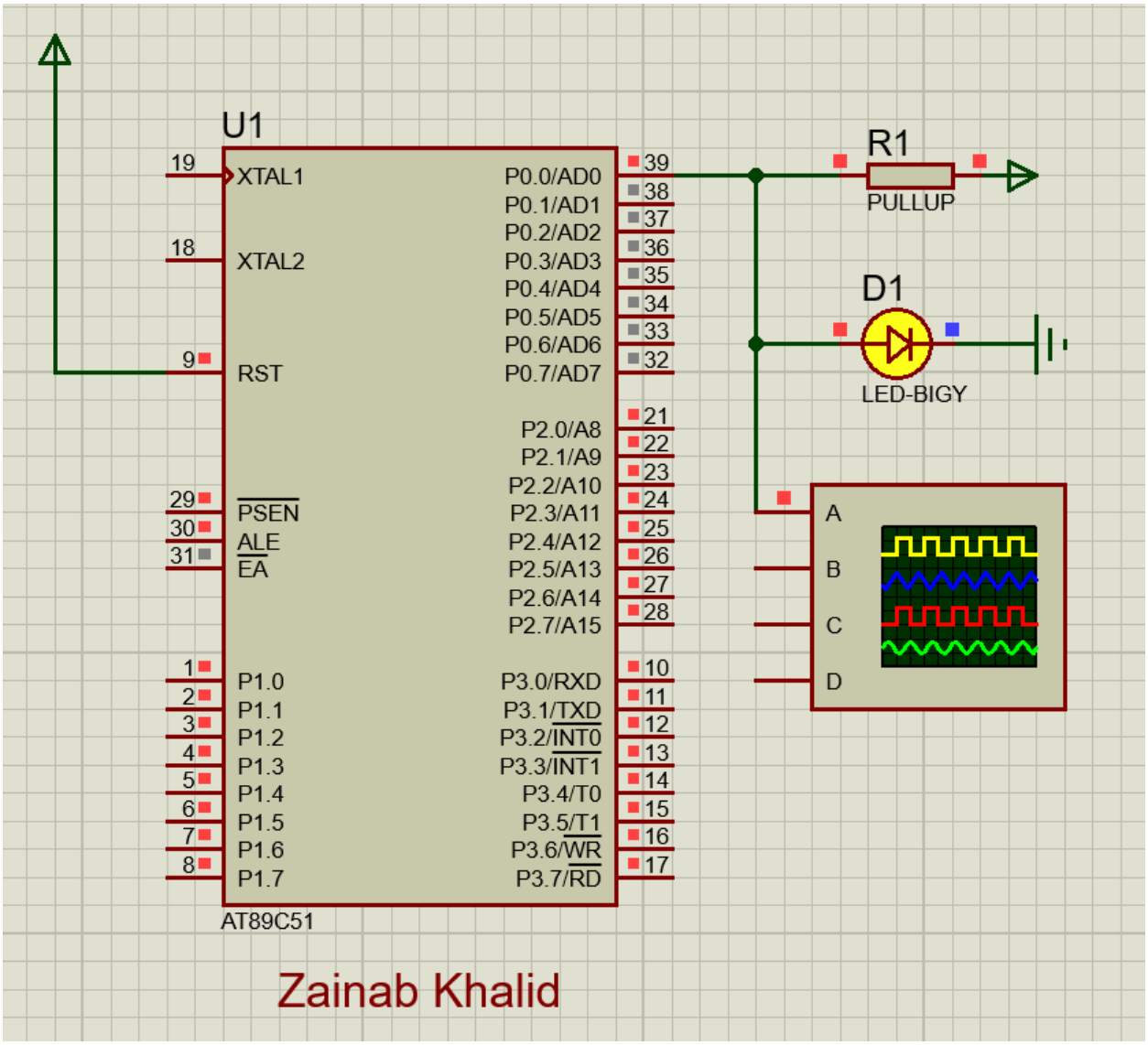
```
#include <reg51.h>
#include <stdio.h>

sbit PZero_0 = P0^0;
void Causing_Delay(unsigned int mSec){
    int i, j;
    for(i = 0 ; i < mSec; i++){
        for(j = 0; j < 257; j++);
    }
}
void main(void){
    while(1){
        PZero_0 = 1;
        Causing_Delay(12);
        PZero_0 = 0;
        Causing_Delay(8);
    }
}
```

Flow Chart



Schematic Diagram



Oscilloscope (Wave Form)