24/11/2020

## LAB PROGRAM - 13

Q. Display messages FIRE and HELP alternately with flickering effects on a 7-segment display interface for a suitable period time. Ensure a flashing rate that makes it easy to both the messages.

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

char xdata CommW _at_ 0xe803;
char xdata portB _at_ 0xe801;
char xdata portC _at_ 0xe802;
char port[20] = {0x8e, 0xf9, 0xde, 0x86, 0xff, 0xff, 0xff,
                 0xff, 0x89, 0x86, 0xc7, 0x8c}, i;

delay()
{
    long u;
    for(u=0; u<8000; u++);
}

void main()
{
    int d, b, j, m;
    unsigned char k;
    CommW = 0x80;
    do
    {
        i=0;
        for(d=0; d<3; d++)
        {
```

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```
for (b=0; b<4; b++)
{
    k = port[i++];
    for (j=0; j<8; j++)
    {
        m=k;
        k=k&0x80;
        {
            if(k==00)
                portB = 0x00;
            else
                portB = 0x01;
        }
        portC = 0x01;
        portC = 0x00;
        k=m;
        k <<= 1;
    }
}
delay();
} while(1);
}
```