

Program 3:

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

Program: ~~###~~

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

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

```
char xdata commW _at_ 0xe803;
```

```
char xdata portB _at_ 0xe801;
```

```
char xdata portC _at_ 0xe802;
```

```
char xdata port [20] = {0x8e, 0xf9, 0xde, 0x86, 0xff, 0xff, 0xff, 0x89, 0x86,  
0xc9, 0x8c};
```

```
delay()
```

```
{
```

```
    long u;
```

```
    for (u=0; u<8000; u++);
```

```
    {}
```

```
}
```

```
void main()
```

```
{
```

```
    int d, b, i, m;
```

```
    unsigned char k;
```

```
    commW = 0x80;
```

```
    do
```

```
    {
```

```
        i=0;
```

```
        for (d=0; d<3; d++)
```

```
        {
```

```
            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;
```

```
                }
```

Port C = 0x01;

Port C = 0x00;

K = m;

K++ = 1;

}

}

delay();

}

}

while (1);

}