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M T W T F S S  
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VSN [ ] - [ ] [ ] [ ] BM19C5172

COMPASS  
Date: \_\_\_\_\_

### 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.

```
#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, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0};
```

```
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++)
```

```
{
    for (b=0; b<4; b++)
```

```
    K = port[i++];
```

```
    for (j=0; j<8; j++)
```

```
    {
        m = K;
```

```
        K = K & 0x80;
```

```
        {
```

```
            if (K == 0x00)
```

```
                port B = 0x00;
```

```
            else
```

```
                port B = 0x01;
```

```
        }
```

```
        port C = 0x01;
```

```
        port C = 0x00;
```

```
        K = m;
```

```
        K <<= 1;
```

```
    }
```

```
}
```

```
    delay();
```

```
}
```

```
}
```

```
while (1);
```

```
}
```