

Case 1:cathode

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

```
#define SEGMENT_PORT P2
```

```
unsigned char segment_code[10] = {0x3F,0x06,0x5E,0x4F,0x66,0x6D,0x7D,0x07,0x7F,0x6F};
```

```
void delay(unsigned int ms)
```

```
{
```

```
    unsigned int i, j;
```

```
    for (i = 0; i < ms; i++)
```

```
{
```

```
    for (j = 0; j < 1275; j++);
```

```
}
```

```
}
```

```
void main() {
```

```
    unsigned char i;
```

```
    while (1)
```

```
{
```

```
    for (i = 0; i < 10; i++)
```

```
{
```

```
    SEGMENT_PORT = segment_code[i];
```

```
    delay(1000);
```

```
}
```

```
}
```

```
}
```

Case 2

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

```
void delay(){
```

```
    unsigned int i,j;
```

```
    for(i=0; i<255; i++){
```

```
        for (j=0; j<255; j++);
```

```
    }  
}  
  
void main(){  
    unsigned char arr[10]={0xc0, 0xf9, 0xa4, 0xb0, 0x99, 0x92, 0x82, 0xf8, 0x80, 0x90};  
    unsigned int i;  
  
    while(1){  
        for(i=0; i<10; i++){  
            P2 = arr[i];  
            delay();  
        }  
    }  
}
```