

```
#include <stdio.h>
#include <stdlib.h>
#include <string.h>
#include <time.h>

void delay(unsigned int);
typedef enum color {green, yellow, red} colors;

int main()
{
    int state;
    char lightColor[41];
    colors on;
    colors light[] = {green, green, green, green, yellow, yellow, red, red, red, red};
    for (state = 0; state < 10; state++)
    {
        on = light[state];
        switch(on)
        {
            case green: strcpy(lightColor, "green");
                        break;
            case yellow: strcpy(lightColor, "yellow");
                        break;
            case red:    strcpy(lightColor, "red");
        }
        printf("state = %d\tlight = %d\tcolor = %s\n",state, on, lightColor);
        delay(1000);
    }
    system("PAUSE");
    return 0;
}

void delay(unsigned int mseconds)
{
    clock_t goal = mseconds + clock();
    while (goal > clock());
}
```