1. if/else 太多，逻辑乱。

2.想换算法，要改一堆代码。

3. 全局变量谁都能改，出 bug 难查。

```c
void sort(int* arr, int n, int type) {
    if (type == 0) {
        // 冒泡排序
    } else if (type == 1) {
        // 快速排序
    } else if (type == 2) {
        // 插入排序
    }
    // 后面再加就越来越乱
}
```

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}
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```c
typedef void (*SortFn)(int*, int);

void bubble(int* arr,int n){ /*...*/ }
void quick(int* arr,int n){ /*...*/ }

SortFn sorter = quick;
sorter(arr, len);
```

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void sort(int* arr, int n, int type) {
    if (type == 0) {
        // 冒泡排序
    } else if (type == 1) {
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```
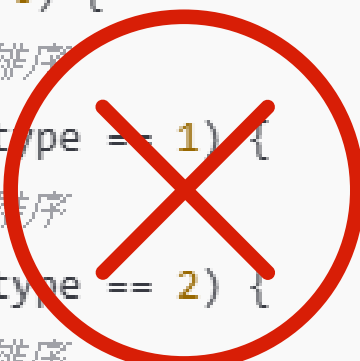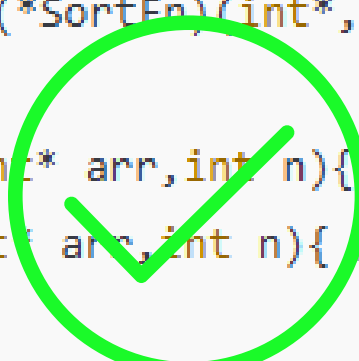
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typedef void (*SortFn)(int*, int);

void bubble(int* arr,int n){ /*...*/ }
void quick(int* arr,int n){ /*...*/ }

SortFn sorter = quick;

sorter(arr, len);
```

```c
#include <stdio.h>

void deviceControl(int device, int cmd) {
    if (device == 0) {  // LED
        if (cmd == 1) printf("LED ON\n");
        else if (cmd == 0) printf("LED OFF\n");
        else printf("LED ERROR\n");
    } else if (device == 1) { // 风扇
        if (cmd == 1) printf("Fan ON\n");
        else if (cmd == 0) printf("Fan OFF\n");
        else printf("Fan ERROR\n");
    } else if (device == 2) { // 蜂鸣器
        if (cmd == 1) printf("Buzzer ON\n");
        else if (cmd == 0) printf("Buzzer OFF\n");
        else printf("Buzzer ERROR\n");
    } else {
        printf("Unknown device\n");
    }
}

int main() {
    int sequence[][2] = {{0,1},{1,1},{2,1},{0,0},{1,0},{2,0}};
    for(int i=0;i<6;i++){
        deviceControl(sequence[i][0], sequence[i][1]);
    }
    return 0;
}
```

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void deviceControl(int device, int cmd) {
    if (device == 0) {  // LED
        if (cmd == 1) printf("LED ON\n");
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#include <stdio.h>

typedef void (*DeviceFn)(int cmd);

void ledControl(int cmd) {
    if(cmd==1) printf("LED ON\n");
    else if(cmd==0) printf("LED OFF\n");
}

void fanControl(int cmd) {
    if(cmd==1) printf("Fan ON\n");
    else if(cmd==0) printf("Fan OFF\n");
}

void buzzerControl(int cmd) {
    if(cmd==1) printf("Buzzer ON\n");
    else if(cmd==0) printf("Buzzer OFF\n");
}

int main() {
    DeviceFn devices[] = {ledControl, fanControl, buzzerControl};
    int sequence[][2] = {{0,1},{1,1},{2,1},{0,0},{1,0},{2,0}};
    for(int i=0;i<6;i++){
        int dev = sequence[i][0];
        int cmd = sequence[i][1];
        devices[dev](cmd);  // 调用对应设备函数
    }
    return 0;
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    if(cmd==1) printf("Buzzer ON\n");
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int main() {
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    for(int i=0;i<6;i++){
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