

■ 逻辑文件vs.物理文件

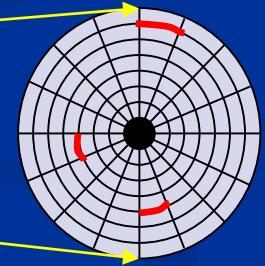
➤ Test.cpp

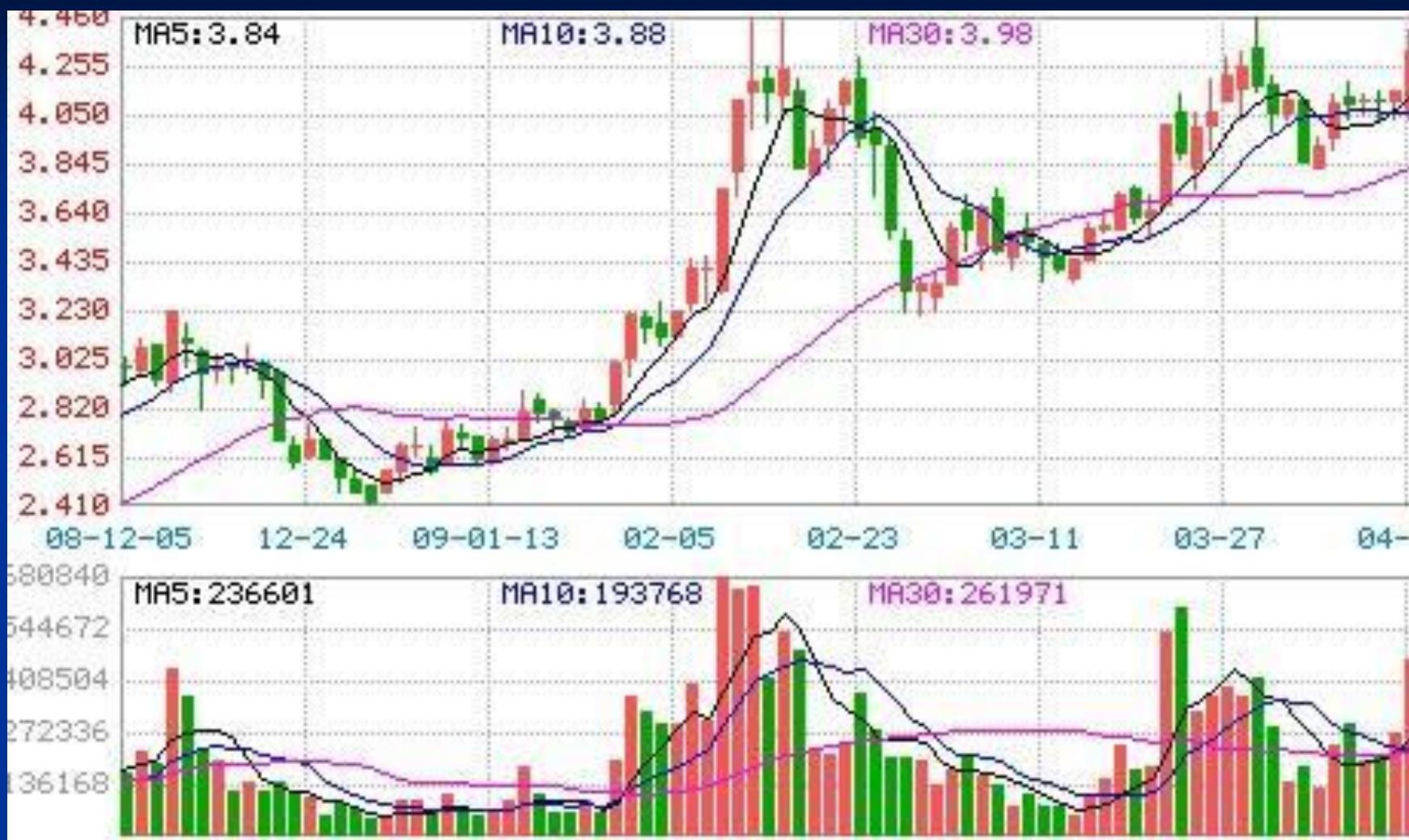
```
#include <iostream>
using namespace std;
void main()
{
    char ch ;
    int i ;
    float f ;
    ifstream ifs;
    ifs.open("C:\\in.TXT");
    ifs >> ch >> i >> f ;
    ifs.close();
}
```

➤ 逻辑文件: C:\\in.TXT

A
12
26.5
.
.
.

➤ 物理文件:





■ 成组链接法核心思想:

- (1) 构建一个大型的栈, 存储所有的空闲磁盘块的块号
- (2) 分配磁盘空间: 执行**出栈**操作

出栈的磁盘块号所对应的磁盘块被分配出去;

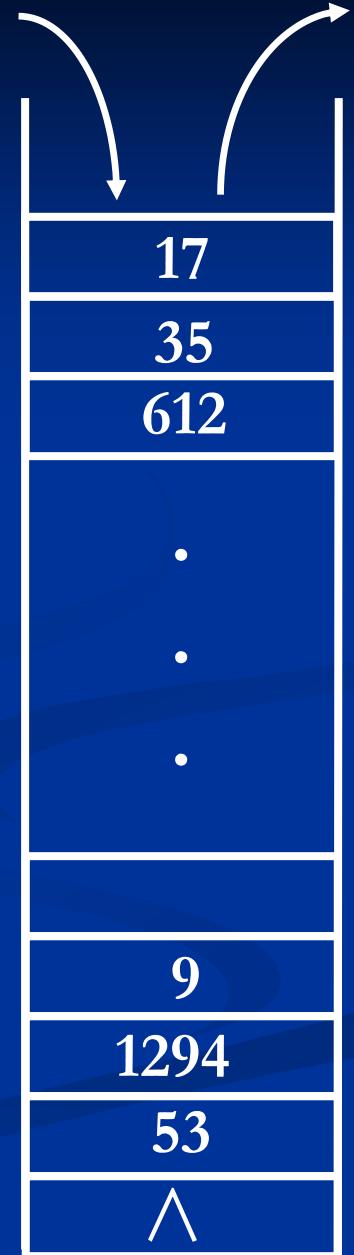
- (3) 回收磁盘空间: 执行**入栈**操作

将被回收的磁盘块的块号入栈;

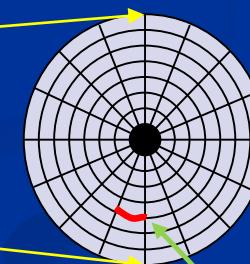
■ 成组链接法如何实现:

- (1) 空闲磁盘块号栈可含上百万个磁盘块号, 如何存储?
- (2) 入栈/出栈的效率: 大型的栈读入内存的开销太大

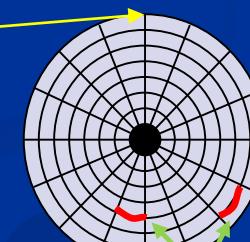
空闲磁盘块号栈



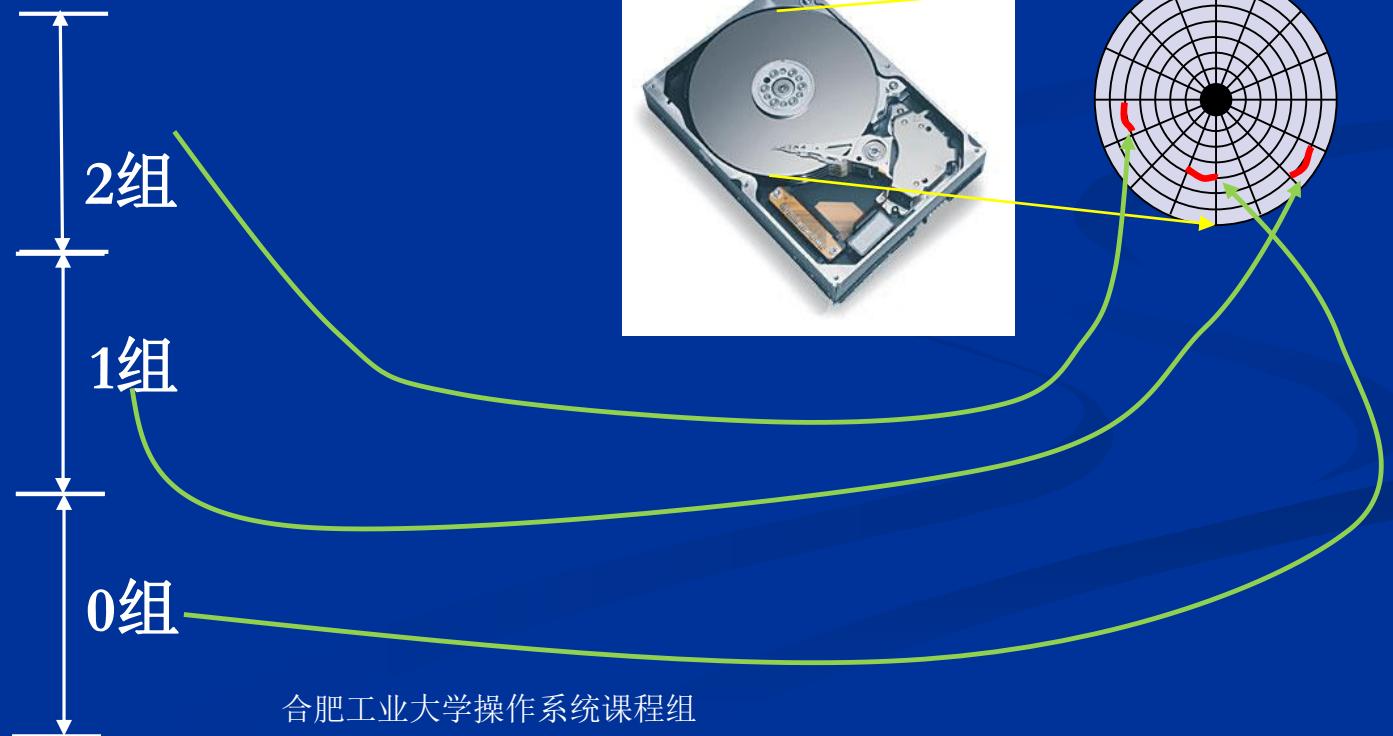
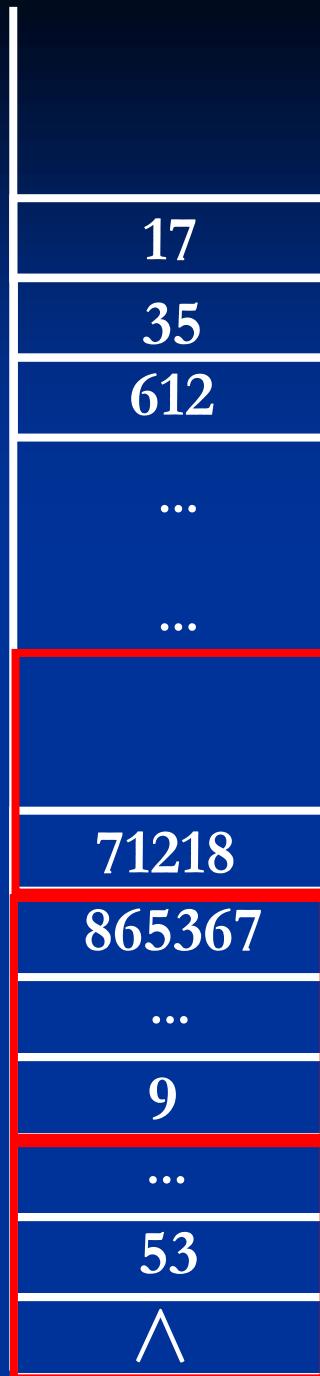
■ 成组链接法：空闲磁盘块号栈的存储



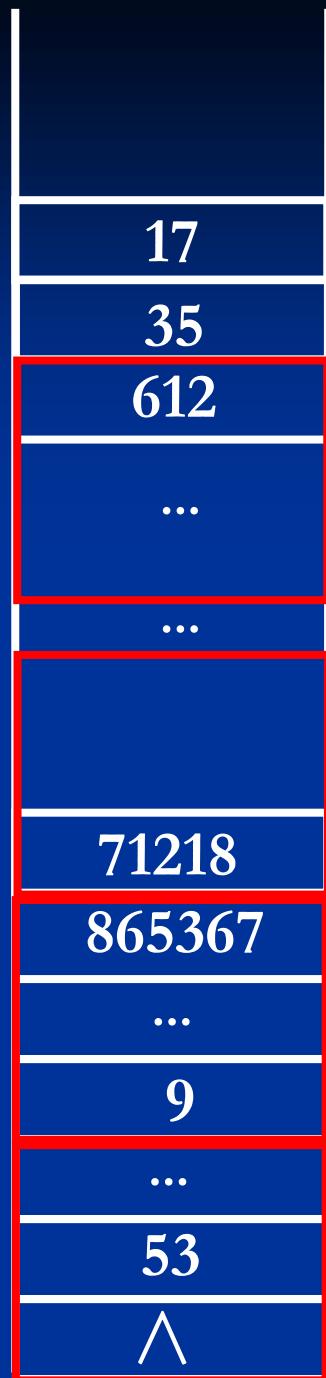
■ 成组链接法：空闲磁盘块号栈的存储



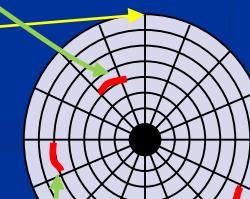
■ 成组链接法：空闲磁盘块号栈的存储



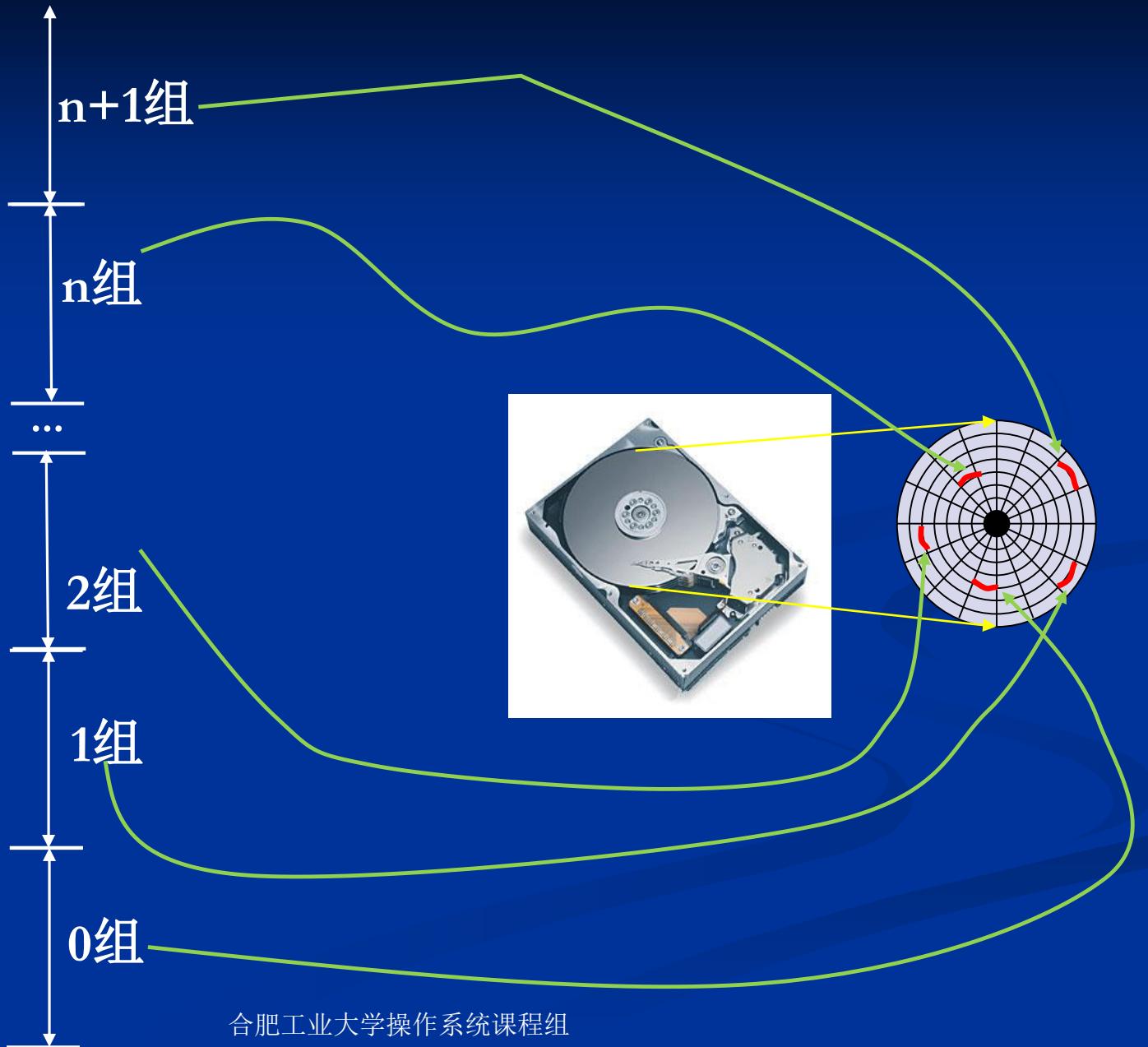
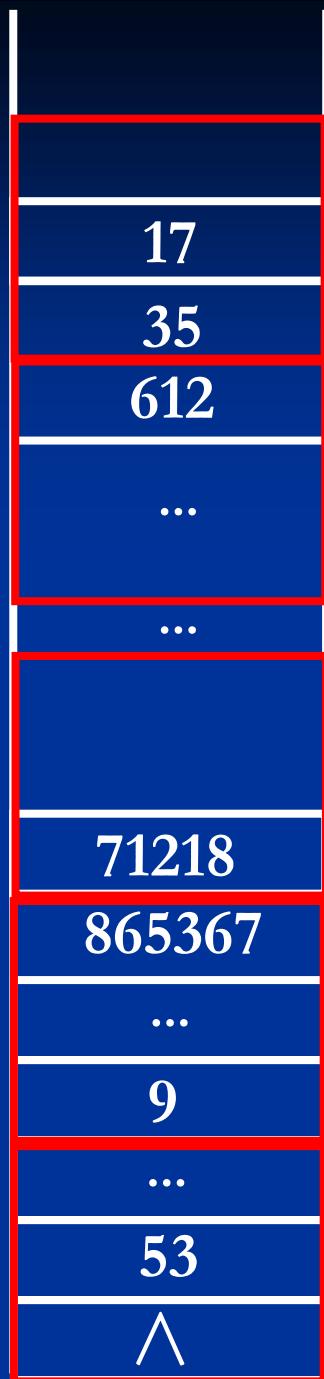
■ 成组链接法：空闲磁盘块号栈的存储



n组
...
2组
...
1组
...
0组

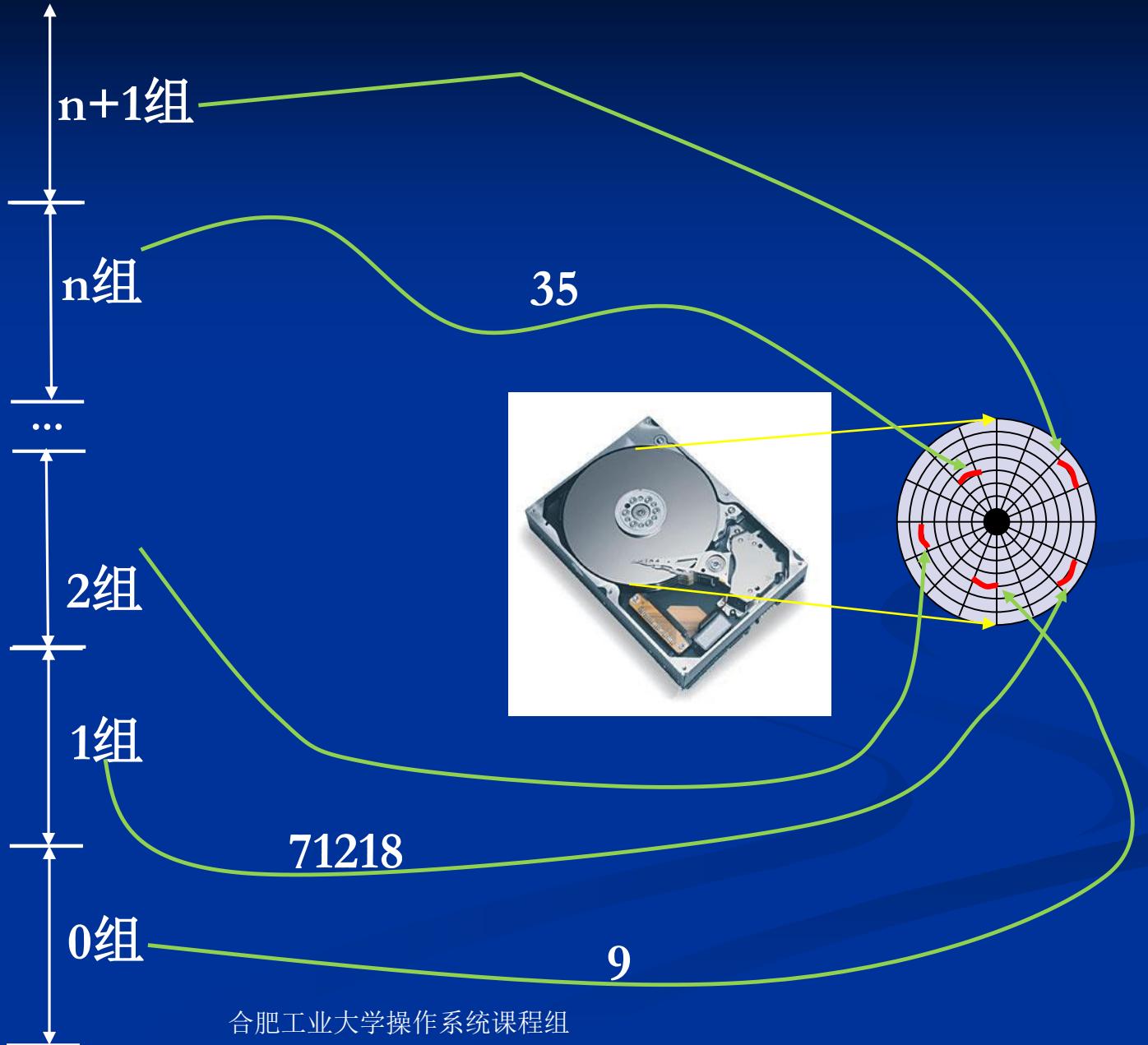
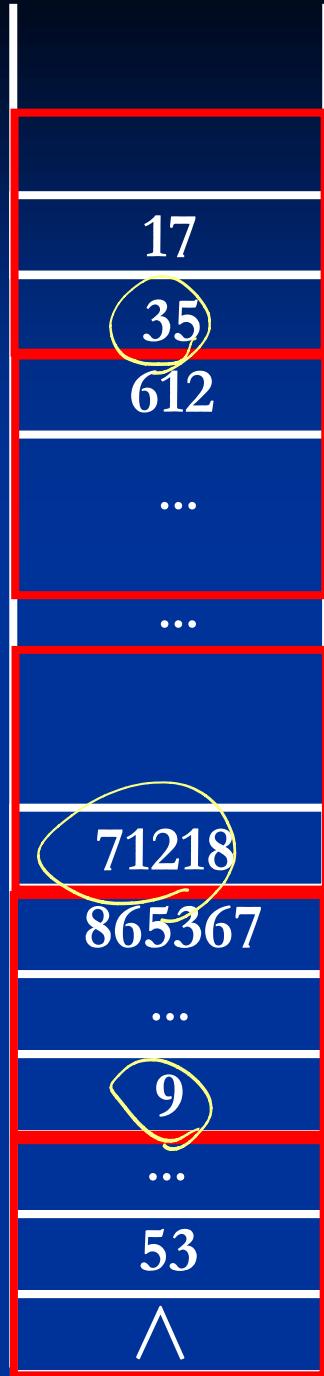


■ 成组链接法：空闲磁盘块号栈的存储



■ 成组链接法：空闲磁盘块号栈的存储

①空闲块
②指针



■ 成组链接法: 空闲磁盘块号栈的出栈入栈
组的尺寸: 100

