

===== array.h =====

#pragma once

struct Array

```
{  
    inline Array(size_t size)  
        : data_(new int[size])  
        , size_(size)  
    {  
        ++instances_;  
    }  
};
```

~Array()

```
{  
    --instances_;  
}
```

~~static void swap_arrays(Array &a, Array &b);~~

....

private:

```
Array(Array const &);  
Array & operator=(Array const&);
```

private:

```
int *    data_;  
size_t  size_;  
static int instances_;
```

};

inline void f(){}

extern int global;

===== array.cpp =====

#include "array.h"

```
static int swaps = 0;  
int Array::instances_ = 0;
```

```
static void swap(int &a, int &b)  
{  
    int tmp = a;  
    a = b;  
    b = tmp;  
    ++swaps;  
}
```

```
static void swap(int *&a, int *&b)  
{  
    int * tmp = a;  
    a = b;  
    b = tmp;  
    ++swaps;  
}
```

```
void Array::swap_arrays(Array &a, Array &b)  
{  
    swap(a.data_, b.data_);  
    swap(a.size_, b.size_);  
}
```

```
int global = 0;
```

```
struct Singleton
{

static Singleton & getinstance() {
    static Singleton s;
    return s;
}

private:
    Singleton(){ }
    Singleton(Singleton const& a);
    Singleton operator=(Singleton const& a);
    ~Singleton(){ }
};

inline void f() {
    static int k = 0;
}

static void g() {
    static int m = 0;
}
```

