

## P12 2.1-4 二进制加法

```
#include <iostream>
#include <string>
using namespace std;
void BinaryAdd(int A[],int B[],int length,int C[]){
    int flag = 0;
    for (int i = length-1; i >=0; i--){
        C[i+1] = A[i] + B[i] + flag;
        int key = C[i+1] % 2;
        if (C[i+1] >= 2){
            C[i+1] = key;
            flag = 1;
        }
        else{
            flag = 0;
        }
    }
    if (flag == 1){
        C[0] = 1;
    }
}
int main(){
    int n;
    cout << "输入二进制位数: " << endl;
    cin >> n;
    int *arrays = new int[n];
    int *arrays1 = new int[n];
    cout << "输入第一个" << n << "位二进制数: " << endl;
    int j = 0;
    while (j < n){
        cin >> arrays[j];
        j++;
    }
    cout << "输入第二个" << n << "位二进制数: " << endl;
    j = 0;
    while (j < n){
        cin >> arrays1[j];
        j++;
    }
```

```
}  
  
int *result = new int[n + 1];  
  
result[0] = 0;  
  
BinaryAdd(arrays, arrays1, n, result);  
  
if (result[0] == 1){  
    j = 0;  
    while (j < n + 1){  
        cout << result[j] << " ";  
        j++;  
    }  
}  
  
else{  
    j = 1;  
    while (j < n + 1){  
        cout << result[j] << " ";  
        j++;  
    }  
}  
  
delete arrays, arrays1, result;  
  
return 0;  
}
```