67. Add Binary

Given two binary strings, return their sum (also a binary string).

The input strings are both **non-empty** and contains only characters `1` or `0`.

Example 1:

```
Input: a = "11", b = "1"
Output: "100"
```

Example 2:

```
Input: a = "1010", b = "1011"
Output: "10101"
```

```cpp
class Solution {
public:
    string addBinary(string a, string b) {
        int acnt = a.size()-1, bcnt = b.size()-1, add = 0;
        string res="";
        while(acnt>=0 && bcnt >=0){
            int num = (a[acnt] - '0') + (b[bcnt] - '0') + add;
             if(num >=2){
                 num -= 2;
                 add = 1;
             }else {
                 add=0;
             }
            res += char(num + '0');
            acnt--; bcnt--;
         }
         while(acnt>=0)
         {
             int num = (a[acnt] - '0') + add;
             if( num ==2){
                 num-=2;
                 add=1;
             }else{
                 add=0;
             }
             res += char(num + '0');
             acnt--;
         }
         while(bcnt>=0){
             int num = (b[bcnt] - '0') + add;
             if( num ==2){
                 num-=2;
                 add=1;
             }else{
                 add=0;
             }
             res += char(num + '0');
             bcnt--;
         }
         if(add==1){
             res += char(add + '0');
         }
         string final_res = "";
         for(int i=res.size()-1;i>=0;i--){
             final_res += res[i];
         }
         return final_res;
    }
};
```