

```
1 // LeetCode 67. Add Binary
2 // Tailor Burkham
3 class Solution {
4 public:
5     string addBinary(string a, string b) {
6         string binarySum;
7         int carry = 0;
8         int i = a.length() - 1, j = b.length() - 1;
9
10        while (i >= 0 || j >= 0 || carry) {
11            int aInt = (i >= 0) ? a[i] - '0' : 0;
12            int bInt = (j >= 0) ? b[j] - '0' : 0;
13
14            int sum = aInt + bInt + carry;
15            carry = sum / 2;
16            binarySum = char((sum % 2) + '0') + binarySum;
17            i--;
18            j--;
19        }
20        return binarySum;
21    }
22 };
```