Question: https://leetcode.com/problems/add-binary/

For every position we need to find it’s one’s value and ten’s value which will be it’s carry.

So the one’s value will be c1^c2^carry and ten’s value will be (c1&c2)|(c2&carry)|(c1&carry).

Now there might be case where s1 is lengthier than s2 so there will be case case where we won’t have c2 for every c1, then consider those c2 as 0, and vice versa.

Code:  
class Solution {

public String addBinary(String s1, String s2) {

int i=s1.length()-1, j=s2.length()-1, carry=0;

String res="";

while(i>=0||j>=0||carry!=0){

int c1=i<0?0:s1.charAt(i)-'0';

int c2=j<0?0:s2.charAt(j)-'0';

int val = c1^c2^carry;

res=val+res;

carry = (c1&c2)|(c2&carry)|(c1&carry);

i--;

j--;

}

return res;

}

}

Github Link :<https://lnkd.in/ecwtJeaz>