

# Add Binary

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Total Accepted:

Question

Solution

**56676** TotalSubmissions: **228975** Difficulty: **Easy**

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

For example,

a = "11"

b = "1"

Return "100" .

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Python



```
1 class Solution(object):
2     def addBinary(self, a, b):
3         """
4         :type a: str
5         :type b: str
6         :rtype: str
7         """
8         len1=len(a);len2=len(b);top=0
9         lens = len1+2 if len1>len2 else len2+2
10        str = [0 for i in range(lens)]
11        i=len1-1;j=len2-1
12        while True:
13            if i<0 and j<0:break
14            elif i<0:str[top]+=ord(b[j])-ord('0');top+=1;j-=1
15            elif j<0:str[top]+=ord(a[i])-ord('0');top+=1;i-=1
16            else:str[top]+=ord(b[j])-ord('0')+ord(a[i])-ord('0');top+=1;i-=1;
17        i=0
18        while i<lens-1:
19            str[i+1]+=str[i]/2
20            str[i]%2
21            i+=1
22        while i>0 and str[i]==0:i-=1
23        ret=""
24        for i in range(i+1):ret.append(chr(str[i]+ord('0')))
```

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```
25         j=i;i=0;
26         while i<j:
27             tmp = ret[i]
28             ret[i]=ret[j]
29             ret[j]=tmp
30             i+=1;j-=1
```

**Custom Testcase** ☒

```
"111"
"1"
```

One line for one parameter.

[Run Code](#)[Submit Solution](#)

Run Code Status: Finished

Run Code Result: ×

Your input

```
"111"
"1"
```

Your answer

```
"1000"
```

Expected answer

```
"1000"
```

Runtime: 84 ms

Submission Result: Accepted (/submissions/detail/40719051/)

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