Codility_

CodeCheck Report: trainingX5A74R-CU8

Test Name:

Check out Codility training tasks

Summary Timeline

Tasks summary

Task	Time spent	Score
ThreeLetters Python	10 min	100%

Total score

Tasks Details

1. **ThreeLetters**

Medium

Given two integers A and B, return a string which contains A letters "a" and B letters "b" with no three consecutive letters being the same.

Task Score	Correctness	Performance
100%	100%	Not assessed

Task description

Write a function `solution` that, given two integers A and B, returns a string containing exactly A letters 'a' and exactly B letters 'b' with no three consecutive letters being the same (in other words, neither "aaa" nor "bbb" may occur in the returned string).

Examples:

1. Given A = 5 and B = 3, your function may return

Solution

Programming language used:	Python
Total time used:	10 minutes
Effective time used:	10 minutes

"aabaabab". Note that "abaabbaa" would also be a correct answer. Your function may return any correct answer.

2. Given A = 3 and B = 3, your function should return "ababab", "aababb", "abaabb" or any of several other strings.

3. Given A = 1 and B = 4, your function should return "bbabb", which is the only correct answer in this case.

Assume that:

- A and B are integers within the range [0..100];
- at least one solution exists for the given A and B.

In your solution, focus on **correctness**. The performance of your solution will not be the focus of the assessment.

Notes: *not defined yet*

Task timeline

14:47:00 14:56:29

Code: 14:56:29 UTC, py, final, score: **100** show code in pop-up

```
1  # you can write to stdout for debugging
2  # print("this is a debug message")
3
4  def solution(A, B):
5      # Implement your solution here
6      pass# you can write to stdout for d
7  # print("this is a debug message")
8
9  def solution(A, B):
10     # Implement your solution here
11
12     result = ""
13
14     while A > 0 or B > 0:
15         if A > B:
16             if result[-2:] != "aa":
17                 result += "a"
18                 A -= 1
19             else:
20                 result += "b"
21                 B -= 1
22         elif B > A:
23             if result[-2:] != "bb":
24                 result += "b"
25                 B -= 1
26             else:
27                 result += "a"
28                 A -= 1
29         else:
30             if result[-2:] == "aa":
31                 result += "b"
32                 B -= 1
33             else:
34                 result += "a"
35                 A -= 1
36
37     return result
```

Analysis summary

The solution obtained perfect score.

Analysis

expand all	Example tests	
▶	example1 first example from the problem	✔ OK

statement		
▶	example2 second example from the problem statement	✔ OK
▶	example3 third example from the problem statement	✔ OK
expand all	**Correctness tests**	
▶	zero A == 0 or B == 0	✔ OK
▶	simple simple and very small tests	✔ OK
▶	a_equals_b A == B	✔ OK
▶	a_almost_equals_b |A - B| <= 2	✔ OK
▶	a_greater_than_b A > B	✔ OK
▶	b_greater_than_a B > A	✔ OK
▶	almost_only_one_solution there are very few correct solutions	✔ OK
▶	only_one_solution there is only one correct solution	✔ OK
▶	max A = 100, B = 100	✔ OK
▶	combinations all combinations such that min(A, B) < 3	✔ OK