



Câu hỏi 2

Đúng

Give a positive integer x, implement recursive function

```
void printHailstone(int number){}
```

to print the Hailstone Sequence of a given number upto 1 (no space at the end).

Hailstone Sequences follow these rules:

- If a number is even, divide it by 2
- If a number is odd, multiply it by 3 and add 1.

Example:

If number = 5. 5 is odd number so next number is $5*3 + 1 = 16$. 16 is even number so next number is $16/2 = 8$...
Finally, we get Hailstone sequence: 5 16 8 4 2 1.

You can find more information at: <https://diendantoanhoc.net/topic/89145-d%C3%A3y-s%E1%BB%91-hailstone/>

Note: Please note that you can't using key work for, while, goto (even in variable names, comment).

You can implement other recursive functions if needed.

For this exercise, we have `#include <iostream>` and using namespace std;

For example:

Test	Result
printHailstone(32);	32 16 8 4 2 1

Answer: (penalty regime: 0 %)

```

1 void printHailstone(int number){
2     if(number==1)
3     {
4         cout<<number;
5         return;
6     }
7     if(number%2==0) {
8         cout<<number<<" ";
9         printHailstone(number/2);
10    }
11    else{
12        cout<<number<<" ";
13        printHailstone(number*3+1);
14    }
15 }
```

Chọn

	Test	Expected	Got	
✓	printHailstone(32);	32 16 8 4 2 1	32 16 8 4 2 1	✓

	Test	Expected	Got	
✓	<code>printHailstone(23);</code>	23 70 35 106 53 160 80 40 20 10 5 16 8 4 2 1	23 70 35 106 53 160 80 40 20 10 5 16 8 4 2 1	✓
✓	<code>printHailstone(13);</code>	13 40 20 10 5 16 8 4 2 1	13 40 20 10 5 16 8 4 2 1	✓
✓	<code>printHailstone(12);</code>	12 6 3 10 5 16 8 4 2 1	12 6 3 10 5 16 8 4 2 1	✓
✓	<code>printHailstone(22);</code> <code>cout << "a";</code>	22 11 34 17 52 26 13 40 20 10 5 16 8 4 2 1a	22 11 34 17 52 26 13 40 20 10 5 16 8 4 2 1a	✓

Passed all tests! ✓

