667. Beautiful Arrangement II

My Submissions | Back to Contest

Given two integers `n` and `k`, you need to construct a list which contains `n` different positive integers ranging from `1` to `n` and obeys the following requirement:
Suppose this list is $[a_1, a_2, a_3, \dots, a_n]$, then the list $[|a_1 - a_2|, |a_2 - a_3|, |a_3 - a_4|, \dots, |a_{n-1} - a_n|]$ has exactly `k` distinct integers.

If there are multiple answers, print any of them.

Example 1:

```
Input: n = 3, k = 1
Output: [1, 2, 3]
Explanation: The [1, 2, 3] has three different positive integers ranging from 1 to 3, and the [1, 1] has exactly
```

Example 2:

```
Input: n = 3, k = 2
Output: [1, 3, 2]
Explanation: The [1, 3, 2] has three different positive integers ranging from 1 to 3, and the [2, 1] has exactly 2 distinct integers: 1 and 2.
```

Note:

1. The `n` and `k` are in the range $1 <= k < n <= 10^4$.

User Accepted:	0
User Tried:	0
Total Accepted:	0
Total Submissions:	0
Difficulty:	Medium