ZigZag Conversion

Question: The string "PAYPALISHIRING" is written in a zigzag pattern on a given number of rows like this: (you may want to display this pattern in a fixed font for better legibility)

```
P   A   H   N
A P L S I I G
Y   I   R
```

And then read line by line: "PAHNAPLSIIGYIR"

Write the code that will take a string and make this conversion given a number of rows:

string convert(string text, int nRows);

convert("PAYPALISHIRING", 3) should return "PAHNAPLSIIGYIR".

Solutions:

```
import functools
import operator
class Solution:
    # @param {string} s
    # @param {integer} numRows
    # @return {string}
    def convert(self, s, numRows):
        if numRows == 1 or numRows >= len(s):
            return s
        zigzag = [[] for x in range(numRows)]
        row, step = 0, 1
        for c in s:
```

```python
            zigzag[row] += c,
            if row == 0:
                step = 1
            elif row == numRows - 1:
                step = -1
            row += step
        return ''.join(functools.reduce(operator.add, zigzag))


Solution().convert("PAYPALISHIRING", 3)
```