

Problem 6: Zigzag Conversion

Problem Information

Difficulty: Medium

Acceptance Rate: 52.85%

Paid Only: No

Tags: String

Problem Description

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 s, int numRows);
```

Example 1:

Input: `s = "PAYPALISHIRING", numRows = 3` **Output:** `"PAHNAPLSIIGYIR"`

Example 2:

Input: `s = "PAYPALISHIRING", numRows = 4` **Output:** `"PINALSIGYAHRPI"`

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

Example 3:

Input: `s = "A", numRows = 1` **Output:** `"A"`

Constraints:

*`1` <= s.length <= 1000` * `s` consists of English letters (lower-case and upper-case),`,` and
`.`.` *`1` <= numRows <= 1000`

Code Snippets

C++:

```
class Solution {  
public:  
    string convert(string s, int numRows) {  
  
    }  
};
```

Java:

```
class Solution {  
    public String convert(String s, int numRows) {  
  
    }  
}
```

Python3:

```
class Solution:  
    def convert(self, s: str, numRows: int) -> str:
```