

## 6. ZigZag Conversion

---

题目描述: <https://leetcode.com/problems/zigzag-conversion/>

给定一个字符串和Z的高度，求其ZigZag变换之后的按行读取的结果

例如: s = "PAYPALISHIRING"

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

结果为: PAHNAPLSIIGYIR

解题思路:

压扁了存储

代码:

```

class Solution {
public:
    string convert(string s, int numRows) {
        if(numRows <= 1){
            return s;
        }
        vector<vector<char>> m(numRows);
        int dir = 1, i = 0;
        for(int k = 0; k < s.size(); k++){
            m[i].push_back(s.at(k));
            if(i == 0){
                dir = 1;
            }
            else if(i == numRows - 1){
                dir = -1;
            }
            i+=dir;
        }
        string res;
        for(int k = 0; k < m.size(); k++){
            for(int l = 0; l < m[k].size(); l++){
                if(m[k][l])
                    res.push_back(m[k][l]);
            }
        }
        return res;
    }
};

```