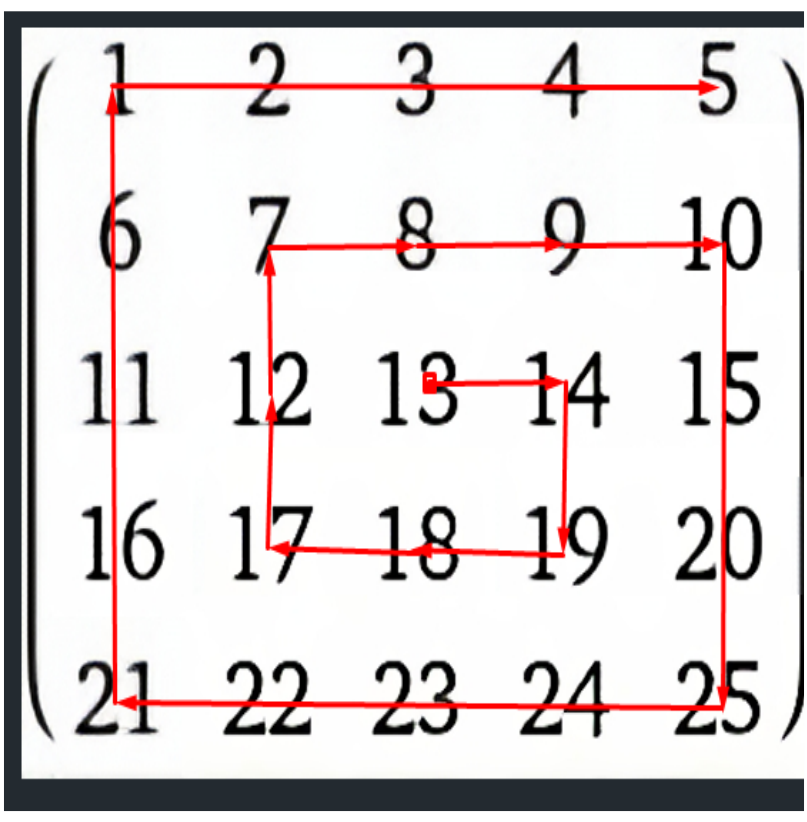
Code Run

Reversed Vortex Matrix

Challenge Description:

Giving a Matrix N*N (N > 1)
when you traverse it in a reversed vortex pattern (see image)



You will get a vector of numbers.

```
exampleVector=[13, 14, 19, 18, 17, 12, 7, 8, 9, 10, 15, 20
, 25, 24, 23, 22, 21, 16, 11, 6, 1, 2, 3, 4, 5]
```

where the last element in the vector is the top right corner of the matrix.

Algorithm:

Part 1:

Create an algorithm that takes as input:

- The vector

- N (columns/rows number)

and return as output the initial matrix (the matrix used to create the vector).

Part 2:

Given a vector of numbers and a list of odd words

Reconstruct the matrix using the previous algorithm and filter out (delete) the odd words to find the secret message hidden within it.

Note: The words can be in any straight direction in the matrix.

Up ⬆️ , Down ⬇️ , Right ➡️ , Left ⬅️ , Up-Right (anti-Diagonal) ↗️ , Up-Left (Diagonal) ↖️ , Down-Right (Diagonal) ↘️ , Down-Left (anti-Diagonal) ↙️

Inputs:

```
N=21
```

```
vector=[113, 82, 108, 108, 67, 82, 66, 115, 104, 112, 112
, 117, 108, 115, 66, 66, 108, 108, 101, 107, 115, 112, 112
, 112, 115, 82, 113, 114, 112, 112, 101, 67, 67, 116, 114
, 67, 119, 67, 66, 82, 115, 112, 66, 97, 104, 99, 82, 67,
 114, 117, 67, 82, 108, 112, 104, 82, 107, 112, 66, 66, 67,
 117, 115, 67, 108, 67, 105, 115, 67, 113, 82, 104, 114, 66
, 104, 112, 116, 112, 105, 114, 99, 115, 115, 108, 113, 115
, 99, 112, 119, 66, 115, 103, 112, 112, 104, 112, 98, 101,
 67, 117, 99, 112, 112, 113, 102, 66, 108, 82, 116, 112, 99
, 66, 97, 66, 116, 114, 97, 100, 66, 82, 33, 82, 101, 116,
 115, 116, 97, 114, 116, 115, 105, 99, 97, 82, 111, 99, 67
, 67, 82, 121, 67, 118, 97, 99, 82, 112, 82, 108, 112, 115
, 116, 100, 97, 114, 116, 108, 114, 113, 112, 66, 100, 82
, 114, 117, 98, 121, 97, 67, 112, 104, 112, 112, 103, 110
, 97, 108, 111, 103, 112, 100, 116, 112, 104, 82, 66, 108,
 108, 97, 99, 115, 97, 112, 97, 101, 67, 114, 117, 82, 82,
 112, 104, 104, 108, 97, 99, 115, 97, 112, 111, 66, 82, 67
, 99, 115, 112, 114, 97, 66, 112, 112, 101, 112, 97, 115,
 99, 97, 112, 104, 121, 121, 98, 117, 114, 66, 104, 97, 66,
 82, 104, 112, 98, 117, 114, 67, 97, 82, 112, 104, 112, 66,
 117, 82, 82, 114, 66, 112, 104, 115, 66, 66, 112, 101, 116
, 112, 105, 114, 99, 115, 101, 112, 121, 116, 97, 117, 108
, 67, 105, 99, 117, 82, 112, 112, 100, 82, 99, 115, 66, 67
, 66, 66, 108, 66, 112, 116, 112, 104, 112, 66, 112, 114,
 116, 102, 105, 119, 115, 121, 116, 102, 105, 119, 115, 110
, 114, 117, 115, 116, 108, 67, 66, 67, 66, 121, 67, 67, 67
, 112, 116, 82, 66, 108, 82, 82, 103, 110, 97, 108, 111,
 103, 112, 121, 116, 104, 111, 114, 117, 115, 116, 112, 109
, 115, 99, 99, 105, 66, 67, 112, 82, 113, 66, 67, 82, 66,
 66, 67, 67, 66, 67, 66, 67, 66, 67, 116, 115, 119, 105, 102
, 116, 67, 82, 82, 115, 119, 105, 102, 116, 66, 103, 108,
 97, 99, 115, 97, 112, 66, 82, 108, 108, 101, 104, 115, 108
, 108, 101, 104, 115, 108, 82, 82, 97, 117, 108, 66, 106
, 111, 117, 114, 110, 101, 121, 66, 67, 110, 97, 117, 108
, 112, 67, 82, 116, 108, 108, 101, 104, 115, 112, 67, 66,
 108, 82, 67, 82]
```

```
oddWords=['python', 'javascript', 'lua', 'golang', 'php',
 'R', 'B', 'rust', 'ruby', 'typescript', 'C', 'pascal', '
swift', 'kotlin', 'cpp', 'dart', 'shell', 'sql', 'haskell'
]
```

Download!