

## Vertical Text

Published by [Mubashir Hassan](#) in [JavaScript](#) ▼

arrays

formatting

Create a function that converts a string into a matrix of characters that can be read vertically. Add spaces when characters are missing.

### Examples

```
verticalText("Holy bananas") → [
  ["H", "b"],
  ["o", "a"],
  ["l", "n"],
  ["y", "a"],
  [" ", "n"],
  [" ", "a"],
  [" ", "s"]
]
```

```
verticalText("Hello fellas") → [
  ["H", "f"],
  ["e", "e"],
  ["l", "l"],
  ["l", "l"],
  ["o", "a"],
  [" ", "s"]
]
```

## Code

```
JS verticalText.js > ...
1  const verticalText = (str) => {
2    const words = str.split(' ');
3    const max = Math.max(...words.map((word) => word.length));
4    const result = [];
5
6    for (let i = 0; i < max; i++) {
7      result.push(words.map((word) => word[i] || ' '));
8    }
9
10   return result;
11 };
12 console.log(verticalText("Holy bananas"));
13 console.log(verticalText("Hello fellas"));
```

Run

```
PS C:\js\edabit\e> node verticalText.js
[
  [ 'H', 'b' ],
  [ 'o', 'a' ],
  [ 'l', 'n' ],
  [ 'y', 'a' ],
  [ ' ', 'n' ],
  [ ' ', 'a' ],
  [ ' ', 's' ]
]
[
  [ 'H', 'f' ],
  [ 'e', 'e' ],
  [ 'l', 'l' ],
  [ 'l', 'l' ],
  [ 'o', 'a' ],
  [ ' ', 's' ]
]
PS C:\js\edabit\e>
```