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# **grid-strategy Documentation**

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# CHAPTER 1

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## Code Documentation

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Implementations of the GridStrategy class to easily graph multiple plots.

This is the code documentation for the implementation of ‘SquareStrategy’ and ‘RectangularStrategy’.

### 1.1 SquareStrategy

```
class grid_strategy.strategies.SquareStrategy(alignment='center')

classmethod arrange_rows(n, x, y)
    Given a grid of size (x x y) to be filled with n plots, this arranges them as desired.

    Parameters
        • n – The number of plots in the subplot.
        • x – The number of columns in the grid.
        • y – The number of rows in the grid.

    Returns Returns a tuple containing a grid arrangement, see get_grid() for details.
```

```
classmethod get_grid_arrangement(n)
    Return an arrangement of rows containing n axes that is as close to square as looks good.

    Parameters n – The number of plots in the subplot

    Returns Returns a tuple of length nrows, where each element represents the number of plots
        in that row, so for example a 3 x 2 grid would be represented as (3, 3), because there are
        2 rows of length 3.
```

#### Example:

```
>>> GridStrategy.get_grid(7)
(2, 3, 2)
```

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```
>>> GridStrategy.get_grid(6)
(3, 3)
```

**classmethod `stripe_even`(*n\_more*, *more\_val*, *n\_less*, *less\_val*)**  
Prepare striping for an even number of rows.

**Parameters**

- **`n_more`** – The number of rows with the value that there's more of
- **`more_val`** – The value that there's more of
- **`n_less`** – The number of rows that there's less of
- **`less_val`** – The value that there's less of

**Returns** Returns a tuple of striped values with appropriate buffer.

**classmethod `stripe_odd`(*n\_more*, *more\_val*, *n\_less*, *less\_val*)**  
Prepare striping for an odd number of rows.

**Parameters**

- **`n_more`** – The number of rows with the value that there's more of
- **`more_val`** – The value that there's more of
- **`n_less`** – The number of rows that there's less of
- **`less_val`** – The value that there's less of

**Returns** Returns a tuple of striped values with appropriate buffer.

## 1.2 RectangularStrategy

**class** `grid_strategy.strategies.RectangularStrategy(alignment='center')`  
Provide a nearest-to-square rectangular grid.

**classmethod `get_grid_arrangement`(*n*)**  
Retrieves the grid arrangement that is the nearest-to-square rectangular arrangement of plots.

**Parameters** **`n`** – The number of subplots in the plot.

**Returns** Returns a tuple of length `nrows`, where each element represents the number of plots in that row, so for example a 3 x 2 grid would be represented as (3, 3), because there are 2 rows of length 3.

# CHAPTER 2

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