Waffle Chart

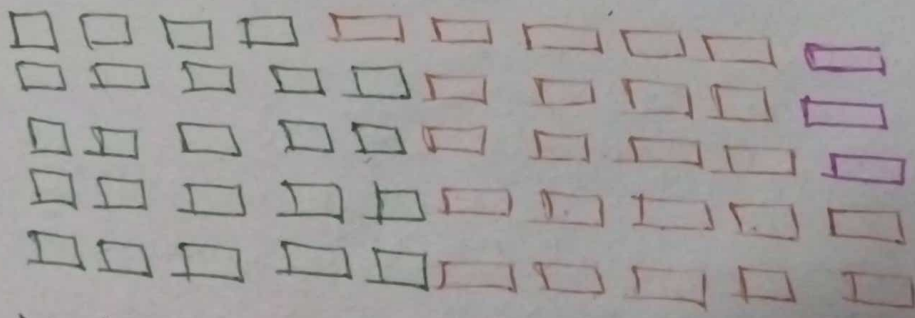
A waffle chart is an alternative to pie charts that display the proportion of different groups with tiles.

A waffle chart is basically a square display, usually consisting of 100 smaller squares arranged in a 10-by-10 layout.

Install library

```
pip install library
```

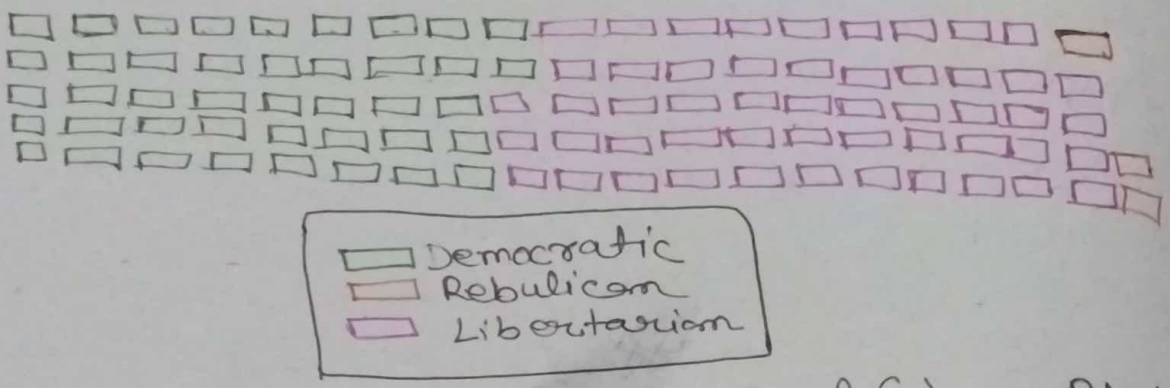
```
from pywaffle import Waffle
fig = plt.figure(
FigureClass = Waffle,
rows = 5,
Columns = 10,
values = [48, 46, 6],
figsize = [5, 3)
)
plt.show()
```



① Values in dict & Auto-sizing

- Values in dict & Auto - sizing

```
data = {'Democratic': 48, 'Republician': 46, 'Libertarian':
fig = plt.figure(
    FigureClass = Waffle,
    rows = 5,
    values = data,
    legend = {'loc': 'upper left', 'bbox_to_anchor':
                                        (1.1, 1)}
)
plt.show()
```

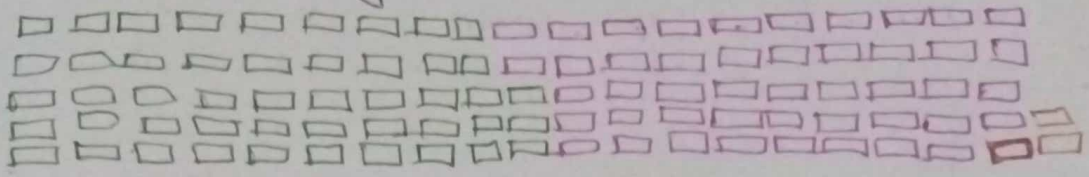


Title, Legend, Colors, Background Colour, Block Color, Direction and Style

```
data = {'Democratic': 48, 'Republician': 46,
                                'Libertarian': 5}
fig = plt.figure(
    FigureClass = Waffle,
    rows = 5,
    values = data,
    colors = ['Green', 'Red', 'Orange'],
    title = {'label': Vote Percentage in 2016 US
                    Presidential Election', 'loc': 'left'},
    labels = [f"{k} ({v}%)" for k, v in data.items()],
    legend = {'loc': 'lower left', 'bbox_to_anchor':
                    (0, -0.4), 'ncol': len(data), 'framealpha':
    starting_location = 'NW',
    block_arranging_style = 'snake'
)
fig.set_facecolor('#EEEEEE')
plt.show()
```

Output

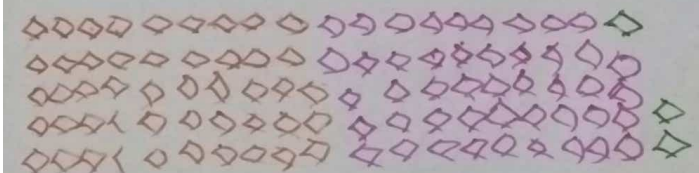
Vote Percentage in 2016 US Presidential Election



Democratic(48%) Rebulican(46%) Libertarian(3%)

Plot with Icons - Pictogram Chart

```
data={'Democratic':48,'Republican':46,'Libertarian':3}
fig = plt.figure(
    FigureClass=Waffle,
    rows=5,
    values=data,
    colour=['orange','pink','green'],
    legend={'loc':'upper left','bbox_to_anchor':(1,1)},
    icons='diamond',
    font_size=12,
    icon_legend=True
)
plt.show()
```



Democratic
Republican
Libertarian

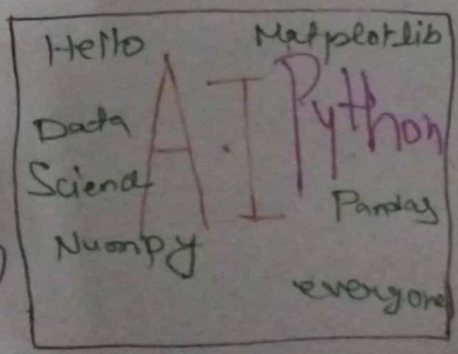
Word Cloud

Word Cloud is a data visualization technique used for representing text data in which the size of each word indicates its frequency or importance.
Significant textual data points can be highlighted using a word cloud.

Install liberary

```
pip install wordcloud
```

Output




```
text=("Hello everyone python, AI,
      Python, AI, Data Science,
      Numpy, Pandas, Matplotlib")
wordcloud = WordCloud(width=480, height=480, margin=0).
                                        generate(text)
plt.imshow(wordcloud, interpolation='bilinear')
plt.axis('off')
plt.margins(x=0, y=0)
plt.show()
```