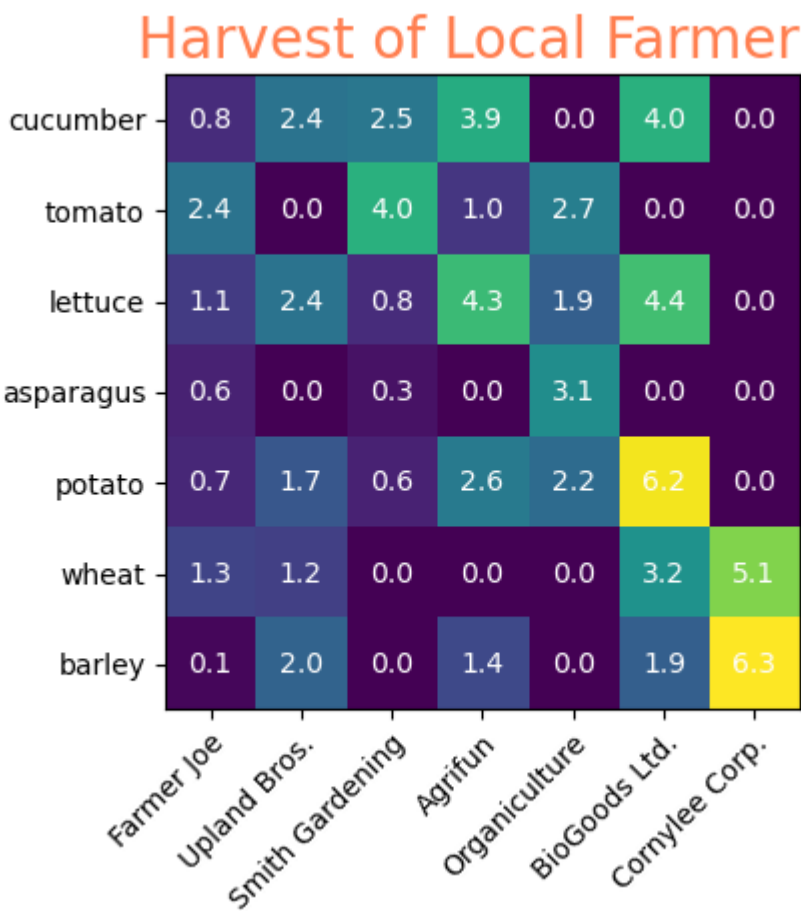


```
In [1]: %matplotlib notebook
import matplotlib.pyplot as plt
import numpy as np
```

```
In [2]: vegetables = ["cucumber", "tomato", "lettuce", "asparagus",
                      "potato", "wheat", "barley"]
farmers = ["Farmer Joe", "Upland Bros.", "Smith Gardening",
           "Agrifun", "Organiculture", "BioGoods Ltd.", "Cornylee Corp."]

harvest = np.array([[0.8, 2.4, 2.5, 3.9, 0.0, 4.0, 0.0],
                    [2.4, 0.0, 4.0, 1.0, 2.7, 0.0, 0.0],
                    [1.1, 2.4, 0.8, 4.3, 1.9, 4.4, 0.0],
                    [0.6, 0.0, 0.3, 0.0, 3.1, 0.0, 0.0],
                    [0.7, 1.7, 0.6, 2.6, 2.2, 6.2, 0.0],
                    [1.3, 1.2, 0.0, 0.0, 0.0, 3.2, 5.1],
                    [0.1, 2.0, 0.0, 1.4, 0.0, 1.9, 6.3]])
```

```
In [3]: fig, ax = plt.subplots()
im = ax.imshow(harvest)
```



```
In [4]: ax.set_xticks(np.arange(len(farmers)))
```

```
Out[4]: [<matplotlib.axis.XTick at 0x1ad0dbc32b0>,
<matplotlib.axis.XTick at 0x1ad0dbc3280>,
<matplotlib.axis.XTick at 0x1ad0dbaceb0>,
<matplotlib.axis.XTick at 0x1ad0dbf5ac0>,
<matplotlib.axis.XTick at 0x1ad0dbf5fa0>,
<matplotlib.axis.XTick at 0x1ad0dc0a4c0>,
<matplotlib.axis.XTick at 0x1ad0db5b5b0>]
```

```
In [5]: ax.set_yticks(np.arange(len(vegetables)))
```

```
Out[5]: [<matplotlib.axis.YTick at 0x1ad0dbc3a60>,
<matplotlib.axis.YTick at 0x1ad0dbc3640>,
<matplotlib.axis.YTick at 0x1ad0dbc0670>,
<matplotlib.axis.YTick at 0x1ad0db8c9a0>,
<matplotlib.axis.YTick at 0x1ad0dc155e0>,
<matplotlib.axis.YTick at 0x1ad0dc15af0>,
<matplotlib.axis.YTick at 0x1ad0dc19040>]
```

```
In [6]: ax.set_xticklabels(farmers,rotation=45,rotation_mode='anchor',ha='right')
```

```
Out[6]: [Text(0, 0, 'Farmer Joe'),
Text(0, 0, 'Upland Bros.'),
Text(0, 0, 'Smith Gardening'),
Text(0, 0, 'Agrifun'),
Text(0, 0, 'Organiculture'),
Text(0, 0, 'BioGoods Ltd.'),
Text(0, 0, 'Cornylee Corp.)]
```

```
In [7]: ax.set_yticklabels(vegetables)
```

```
Out[7]: [Text(0, 0, 'cucumber'),
Text(0, 0, 'tomato'),
Text(0, 0, 'lettuce'),
Text(0, 0, 'asparagus'),
Text(0, 0, 'potato'),
Text(0, 0, 'wheat'),
Text(0, 0, 'barley')]
```

```
In [8]: ax.set_title('Harvest of Local Farmers', fontsize=20, color='coral')
```

```
Out[8]: Text(0.5, 1.0, 'Harvest of Local Farmers')
```

```
In [9]: for i in range(len(vegetables)):
        for j in range(len(farmers)):
            text = ax.text(j,i, harvest[i,j],ha="center",va='center',color='w')
```

```
In [10]: fig.tight_layout()
plt.show()
```