Test
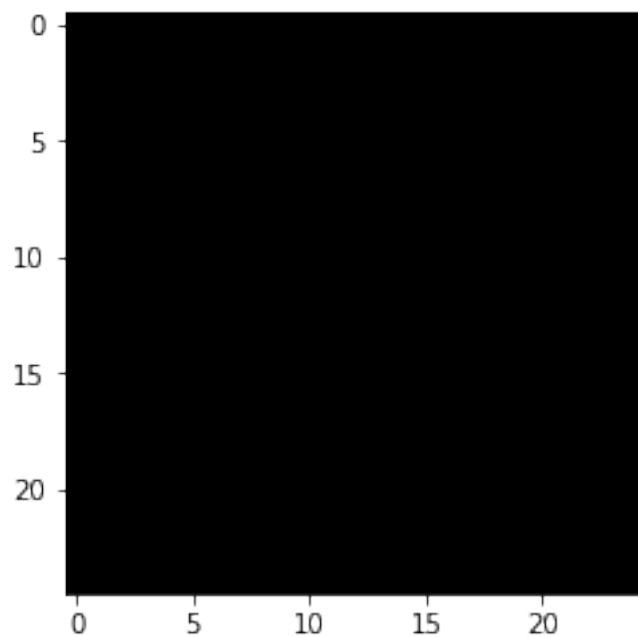
April 28, 2019

```
In [4]: import cv2
        import numpy as np
        import matplotlib.pyplot as plt

In [2]: shp = (25,25)
        out = np.zeros(shp + (3, ), dtype=int)

In [8]: fig = plt.figure(100)
        fig.canvas.set_window_title('Main')
        plt.imshow(out, cmap="Greys")

Out[8]: <matplotlib.image.AxesImage at 0x12a022668>
```
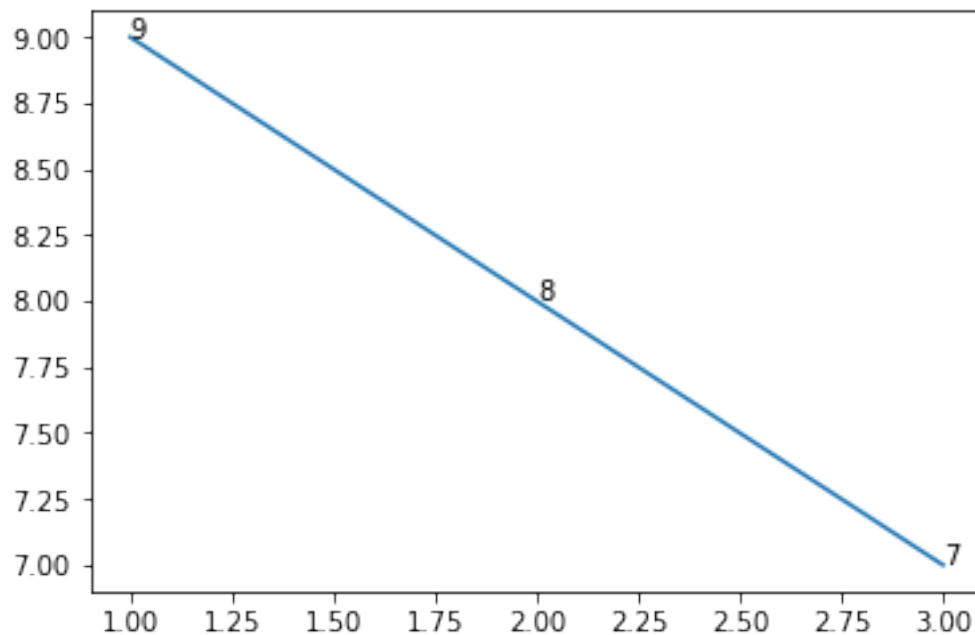


```
In [9]: out.shape

Out[9]: (25, 25, 3)
```

```
In [10]: narrow = np.zeros(shp, dtype=int)

In [12]: narrow.shape

Out[12]: (25, 25)

In [14]: x=[1,2,3]
         y=[9,8,7]

         plt.plot(x,y)
         for a,b in zip(x, y):
             plt.text(a, b, str(b))
         plt.show()
```



```
In [23]: import numpy as np
         import matplotlib.pyplot as plt

         fig, ax = plt.subplots()

         min_val, max_val = 0, 25

         intersection_matrix = np.random.randint(0, 10, size=(max_val, max_val))

         fig = ax.figure
         fig.canvas.set_window_title('4-Way')
         ax.matshow(intersection_matrix, cmap=plt.cm.Blues)
```
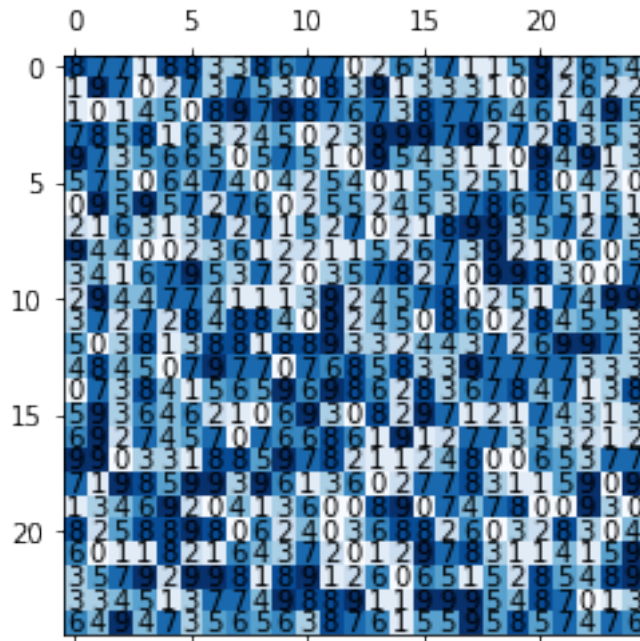
2

```python
for i in range(25):
    for j in range(25):
        c = intersection_matrix[j,i]
        ax.text(i, j, str(c), va='center', ha='center')
```



```python
In [19]: import numpy as np
         import matplotlib.pyplot as plt

         fig, ax = plt.subplots()

         min_val, max_val = 0, 25

         for i in range(25):
             for j in range(25):
                 c = intersection_matrix[i][j]
                 ax.text(i+0.5, j+0.5, str(c), va='center', ha='center')

         plt.matshow(intersection_matrix, cmap=plt.cm.Blues)

         ax.set_xlim(min_val, max_val)
         ax.set_ylim(min_val, max_val)
         ax.set_xticks(np.arange(max_val))
         ax.set_yticks(np.arange(max_val))
         ax.grid()
```

```
    --------------------------------------------------------------------------------

    IndexError                                Traceback (most recent call last)

    <ipython-input-19-1b7eb98fa916> in <module>
      8 for i in range(25):
      9     for j in range(25):
    ---> 10         c = intersection_matrix[i][j]
     11         ax.text(i+0.5, j+0.5, str(c), va='center', ha='center')
     12


    IndexError: index 15 is out of bounds for axis 0 with size 15
```
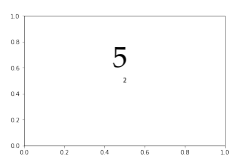
1

6

9

9

5

0

5

6

6

7

5

9

6

4

5

2

In [ ]: