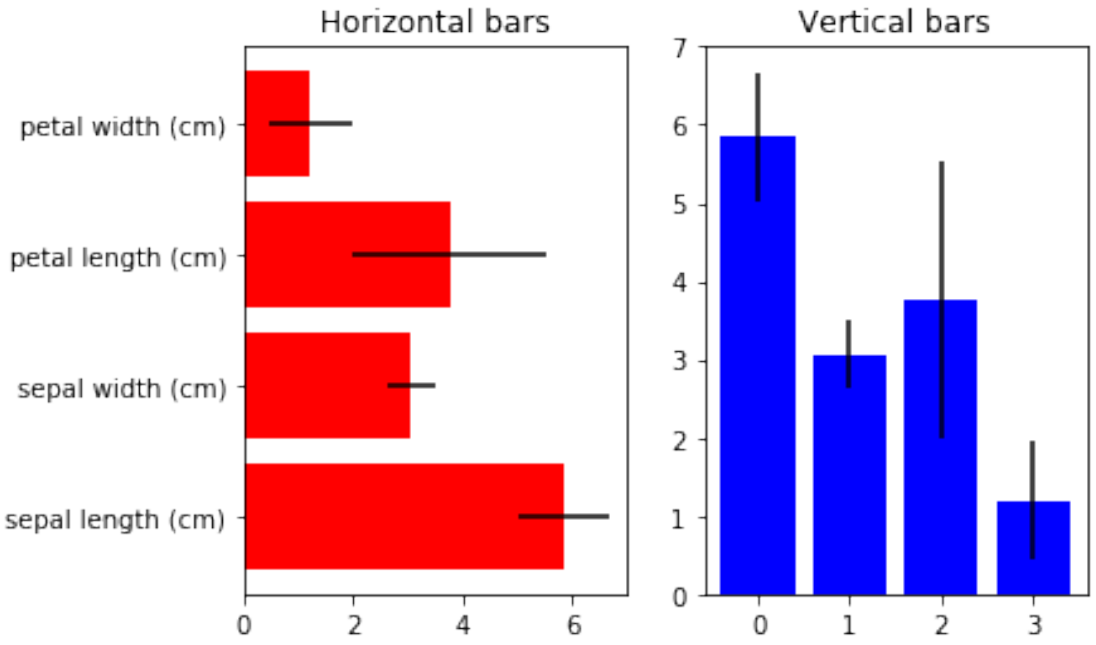
visualization2

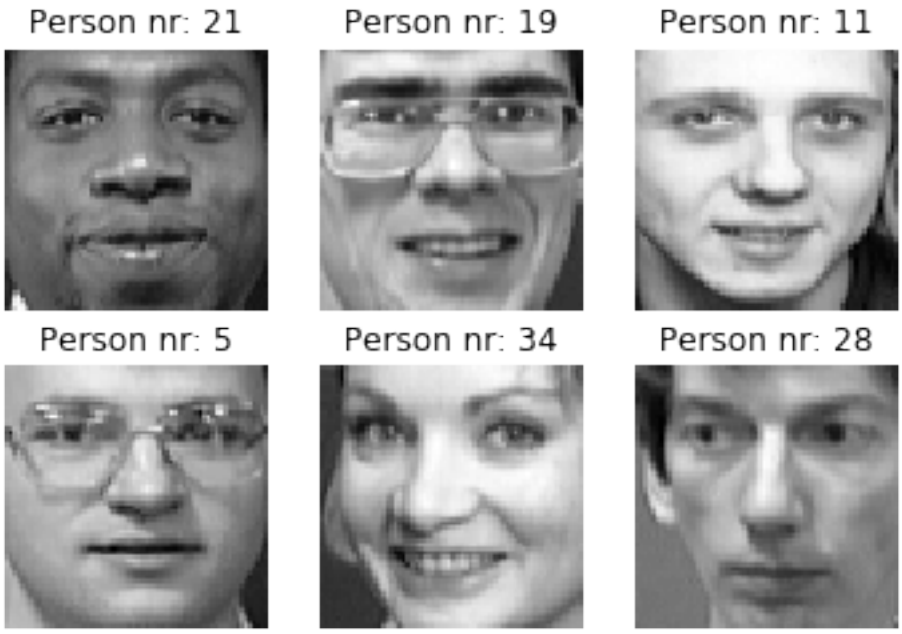
April 15, 2019

```
In [1]: %matplotlib inline
        from sklearn.datasets import load_iris
        import numpy as np
        import matplotlib.pyplot as plt
        iris = load_iris()
        averge = np.mean(iris.data,axis=0)
        std = np.std(iris.data,axis=0)
        range_ = range(np.shape(iris.data)[1])
```

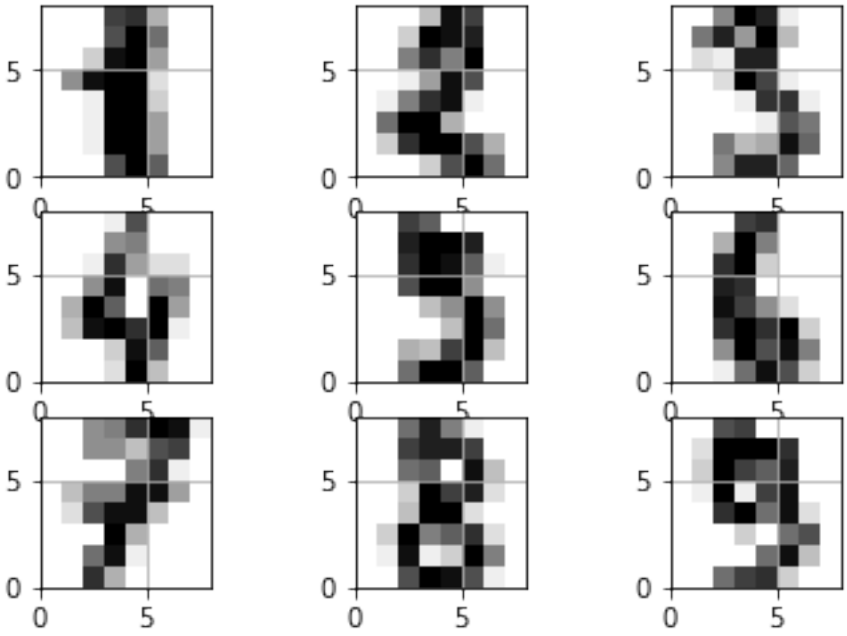
```
In [5]: plt.subplot(1,2,1)
        plt.title("Horizontal bars")
        plt.barh(range_, averge, color='r',xerr=std, alpha=1, align='center')
        plt.yticks(range_, iris.feature_names)
        plt.subplot(1,2,2)
        plt.title("Vertical bars")
        plt.bar(range_, averge, color='b', yerr=std, alpha=1, align='center')
        plt.xticks(range_, range_)
        plt.show()
```



In [14]:
```
from sklearn.datasets import fetch_olivetti_faces
dataset = fetch_olivetti_faces(shuffle=True, random_state=5)
for k in range(6):
    plt.subplot(2,3,k+1)
    plt.imshow(dataset.data[k].reshape(64,64), cmap=plt.cm.gray, interpolation='neares
    plt.title("Person nr: %s" % str(dataset.target[k]))
    plt.axis('off')
plt.show()
```



In [16]:
```
from sklearn.datasets import load_digits
digits = load_digits()
for number in range(1,10):
    plt.subplot(3,3,number)
    plt.imshow(digits.images[number], cmap='binary', interpolation='none',extent=[0,8
    plt.grid()
plt.show()
```



In [ ]: