

Data shape (400, 4096)
Target Shapes (400,)
There are 40 unique persons in the dataset
Size of each image is 64x64

Confusion matrix: $\begin{bmatrix} 3 & 0 & 0 & \dots & 0 & 0 & 0 \\ 0 & 1 & 0 & \dots & 0 & 0 & 0 \\ 0 & 0 & 1 & \dots & 0 & 0 & 0 \\ \dots & & & & & & \\ 0 & 0 & 0 & \dots & 2 & 0 & 0 \\ 0 & 0 & 0 & \dots & 0 & 3 & 0 \\ 1 & 0 & 0 & \dots & 0 & 0 & 1 \end{bmatrix}$

Out[3]: dict_keys(['data', 'images', 'target', 'DESCR'])

x train: (280, 4096)
x test: (120, 4096)

Naive bayes accuracy:73.33

Multinomial Naive bayes accuracy:85.83
number of missclassified images 17
Total images in test set 120
Accuracy: 85.83 %



[5 rows x 30 columns]
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 569 entries, 0 to 568
Data columns (total 30 columns):

#	Column	Non-Null Count	Dtype
0	mean radius	569 non-null	float64
1	mean texture	569 non-null	float64
2	mean perimeter	569 non-null	float64
3	mean area	569 non-null	float64
4	mean smoothness	569 non-null	float64
5	mean compactness	569 non-null	float64
6	mean concavity	569 non-null	float64
7	mean concave points	569 non-null	float64
8	mean symmetry	569 non-null	float64
9	mean fractal dimension	569 non-null	float64
10	radius error	569 non-null	float64
11	texture error	569 non-null	float64
12	perimeter error	569 non-null	float64
13	area error	569 non-null	float64
14	smoothness error	569 non-null	float64
15	compactness error	569 non-null	float64
16	concavity error	569 non-null	float64
17	concave points error	569 non-null	float64
18	symmetry error	569 non-null	float64
19	fractal dimension error	569 non-null	float64
20	worst radius	569 non-null	float64
21	worst texture	569 non-null	float64
22	worst perimeter	569 non-null	float64
23	worst area	569 non-null	float64
24	worst smoothness	569 non-null	float64
25	worst compactness	569 non-null	float64
26	worst concavity	569 non-null	float64
27	worst concave points	569 non-null	float64
28	worst symmetry	569 non-null	float64
29	worst fractal dimension	569 non-null	float64

dtypes: float64(30)
memory usage: 133.5 KB
None
(569, 30)

	mean radius	mean texture	mean perimeter	mean area	mean smoothness	\
0	17.99	10.38	122.80	1001.0	0.11840	
1	20.57	17.77	132.90	1326.0	0.08474	
2	19.69	21.25	130.00	1203.0	0.10960	
3	11.42	20.38	77.58	386.1	0.14250	
4	20.29	14.34	135.10	1297.0	0.10030	
	mean compactness	mean concavity	mean concave points	mean symmetry	\	
0	0.27760	0.3001	0.14710	0.2419		
1	0.07864	0.0869	0.07017	0.1812		
2	0.15990	0.1974	0.12790	0.2069		
3	0.28390	0.2414	0.10520	0.2597		
4	0.13280	0.1980	0.10430	0.1809		
	mean fractal dimension	...	worst radius	worst texture	worst perimeter	\
0	0.07871	...	25.38	17.33	184.60	
1	0.05667	...	24.99	23.41	158.80	
2	0.05999	...	23.57	25.53	152.50	
3	0.09744	...	14.91	26.50	98.87	
4	0.05883	...	22.54	16.67	152.20	
	worst area	worst smoothness	worst compactness	worst concavity	\	
0	2019.0	0.1622	0.6656	0.7119		
1	1956.0	0.1238	0.1866	0.2416		
2	1709.0	0.1444	0.4245	0.4504		
3	567.7	0.2098	0.8663	0.6869		
4	1575.0	0.1374	0.2050	0.4000		
	worst concave points	worst symmetry	worst fractal dimension			
0	0.2654	0.4601	0.11890			
1	0.1860	0.2750	0.08902			
2	0.2430	0.3613	0.08758			
3	0.2575	0.6638	0.17300			
4	0.1625	0.2364	0.07678			