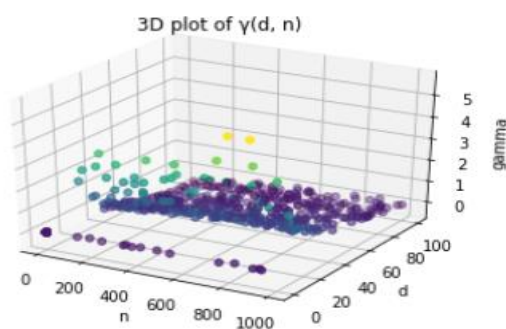
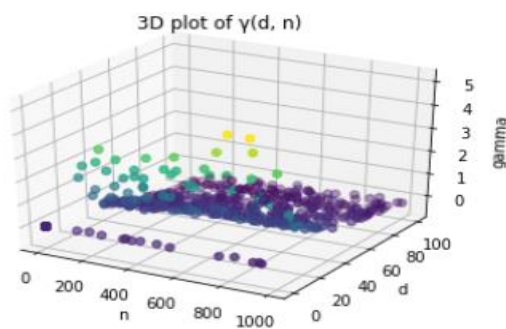
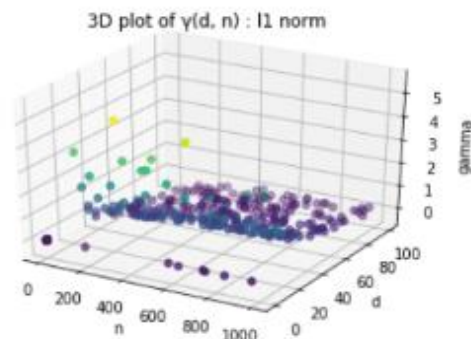
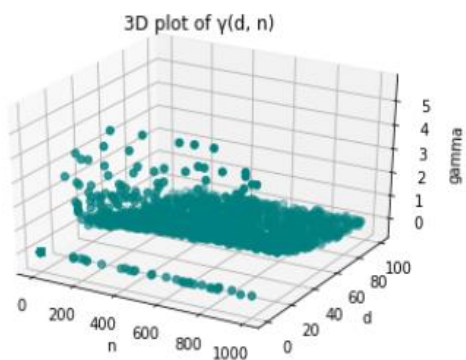
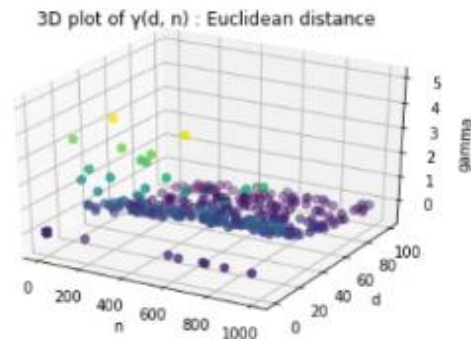
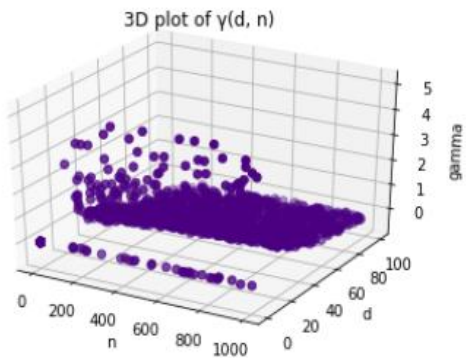


Problem 3 – Curse of Dimensionality



Problem 5 – PCA

```
IPython console
Console 1/A

In [4]: runfile('C:/Users/Preks/Downloads/PCA_new.py', wdir='C:/Users/Preks/Downloads')

principal component 1 ... category
0 -2.264542 ... Iris-setosa
1 -2.086426 ... Iris-setosa
2 -2.367950 ... Iris-setosa
3 -2.304197 ... Iris-setosa
4 -2.388777 ... Iris-setosa
5 -2.070537 ... Iris-setosa
6 -2.445711 ... Iris-setosa
7 -2.233842 ... Iris-setosa
8 -2.341958 ... Iris-setosa
9 -2.188676 ... Iris-setosa
10 -2.163487 ... Iris-setosa
11 -2.327378 ... Iris-setosa
12 -2.224083 ... Iris-setosa
13 -2.639716 ... Iris-setosa
14 -2.192292 ... Iris-setosa
15 -2.251465 ... Iris-setosa
16 -2.202750 ... Iris-setosa
17 -2.190179 ... Iris-setosa
18 -1.894074 ... Iris-setosa
19 -2.339949 ... Iris-setosa
20 -1.914556 ... Iris-setosa
21 -2.204645 ... Iris-setosa
22 -2.774170 ... Iris-setosa
23 -1.820412 ... Iris-setosa
24 -2.228217 ... Iris-setosa
25 -1.957024 ... Iris-setosa
26 -2.052063 ... Iris-setosa
27 -2.168194 ... Iris-setosa
28 -2.140306 ... Iris-setosa
29 -2.268790 ... Iris-setosa
...
```

```
IPython console
Console 1/A

...
120 2.040496 ... Iris-virginica
121 0.973915 ... Iris-virginica
122 2.898064 ... Iris-virginica
123 1.329194 ... Iris-virginica
124 1.704241 ... Iris-virginica
125 1.957728 ... Iris-virginica
126 1.171905 ... Iris-virginica
127 1.019781 ... Iris-virginica
128 1.786009 ... Iris-virginica
129 1.864778 ... Iris-virginica
130 2.435497 ... Iris-virginica
131 2.316082 ... Iris-virginica
132 1.860371 ... Iris-virginica
133 1.111272 ... Iris-virginica
134 1.197469 ... Iris-virginica
135 2.800949 ... Iris-virginica
136 1.580155 ... Iris-virginica
137 1.347044 ... Iris-virginica
138 0.923433 ... Iris-virginica
139 1.853552 ... Iris-virginica
140 2.016157 ... Iris-virginica
141 1.903117 ... Iris-virginica
142 1.153190 ... Iris-virginica
143 2.043308 ... Iris-virginica
144 2.001691 ... Iris-virginica
145 1.870522 ... Iris-virginica
146 1.558492 ... Iris-virginica
147 1.520845 ... Iris-virginica
148 1.376391 ... Iris-virginica
149 0.959299 ... Iris-virginica

[150 rows x 3 columns]
```

