ass7

December 2, 2015

In [142]:
```
import numpy as np
import matplotlib.pyplot as plt
import matplotlib.cbook as cbook
```

In [143]:
```
data = []
f = open('plot.csv','r')
for line in f:
    x,y,count = line.strip().split(',')
    data.append([x,y,count])
```

In [144]:
```
data.sort()
```

In [146]:
```
alph = data
x = []
y = []
for i in alph:
    x.append(i[0])
    y.append(i[1])

print x
```

```
['a', 'a', 'a', 'a', 'a', 'a', 'a', 'a', 'a', 'a', 'a', 'a', 'a', 'a', 'a', 'a', 'a', 'a', 'a', 'a', 'a', 'a
```

In [147]:
```
Xuniques, X = np.unique(x, return_inverse=True)
Yuniques, Y = np.unique(y, return_inverse=True)
import string
dict = []
for x, y in enumerate(string.ascii_lowercase, 0):
    dict.append([x,y])
for i in data:
    for j in dict:
        if i[0]==j[1]:
            i[0]=j[0]
for i in data:
    for j in dict:
        if i[1]==j[1]:
            i[1]=j[0]
data_a= np.asarray(data)
data_a.astype(int)
pl = data_a[:,[0,1]]
xx=data_a[:,0]
yy=data_a[:,1]
point = list(data_a[:,2])
```

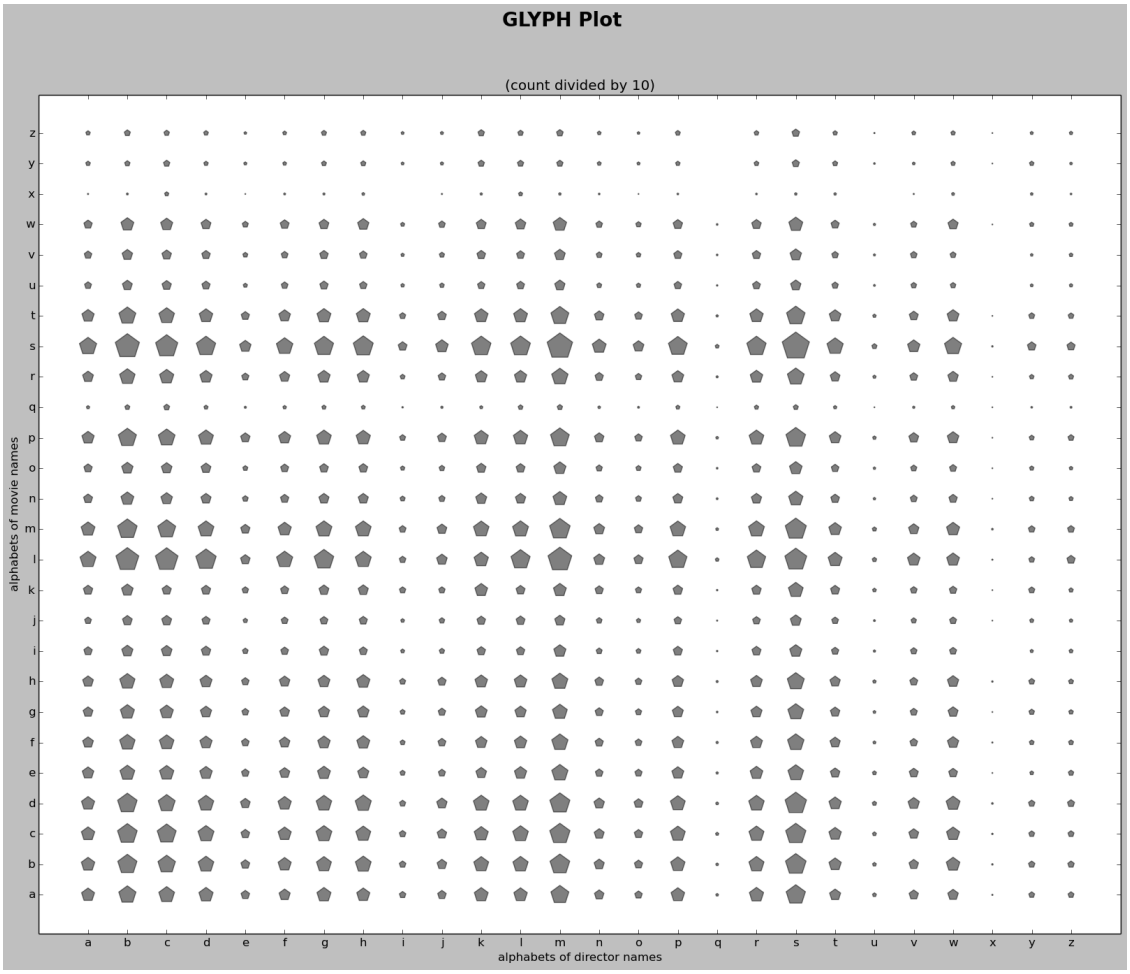
In [172]:
```
point = map(int,point)
new_point = [x/10 for x in point]
```

In [173]:
```
fig_size = plt.rcParams["figure.figsize"]
print "Current size:", fig_size
fig_size[0] = 20
fig_size[1] = 15
plt.rcParams["figure.figsize"] = fig_size
```

```
Current size: [20.0, 15.0]
```

In [189]:
```
fig, ax = plt.subplots()
fig.suptitle('GLYPH Plot', fontsize=20, fontweight='bold')
ax.set(xticks=range(len(Xuniques)) ,xticklabels=Xuniques,
       yticks=range(len(Yuniques)), yticklabels=Yuniques)
ax.scatter(xx,yy,s = new_point,alpha = 0.5,marker= 'p',color = 'k')
ax.set_xlabel('alphabets of director names')
ax.set_ylabel('alphabets of movie names')
ax.set_title('(count divided by 10)')
```

Out[189]: <matplotlib.text.Text at 0xa3759b0c>



In [ ]: