Probabiliity

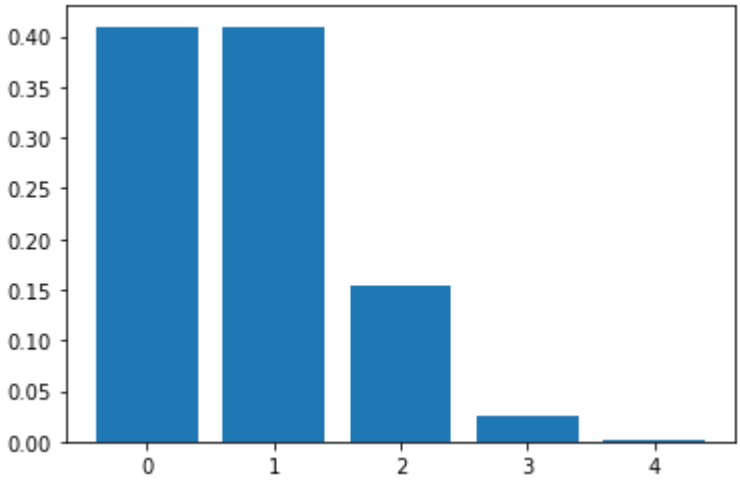
In [1]:

```
from scipy.stats import binom
import matplotlib.pyplot as plt
```

Binomial

In [2]:

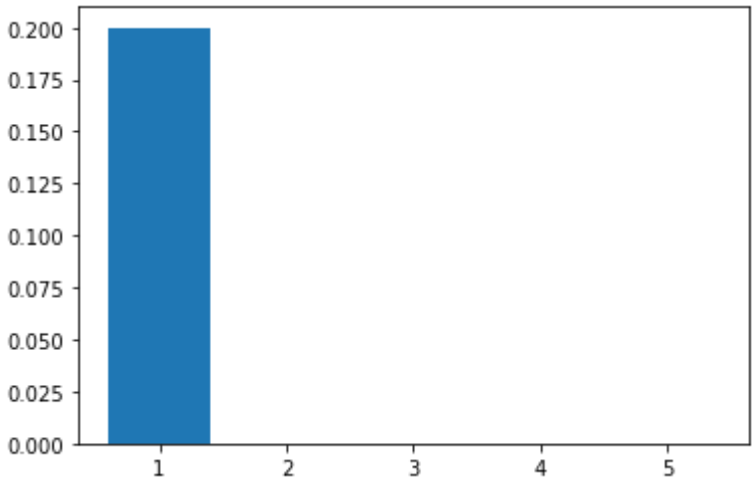
```
n=4
p=0.2
r_values=list(range(n+1))
dist=[binom.pmf(r,n,p)for r in r_values]
plt.bar(r_values,dist)
plt.show()
```



bernoulli

In [7]:

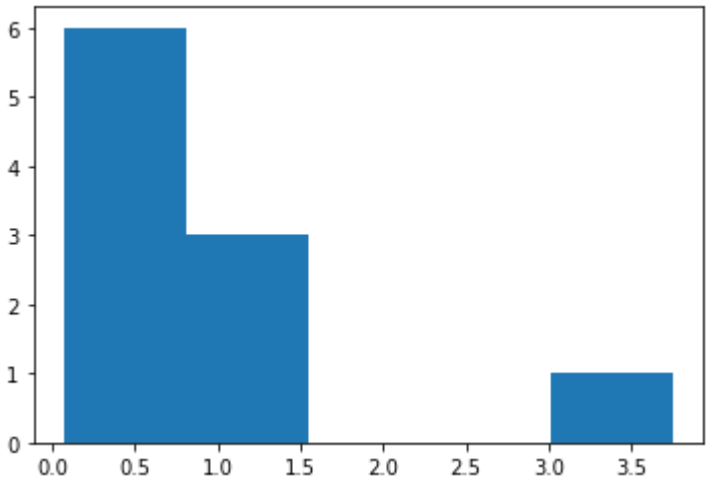
```
from scipy.stats import bernoulli
bd=bernoulli(0.2)
x=[1,5]
plt.bar(x,bd.pmf(x))
plt.show()
```



exponential

In [4]:

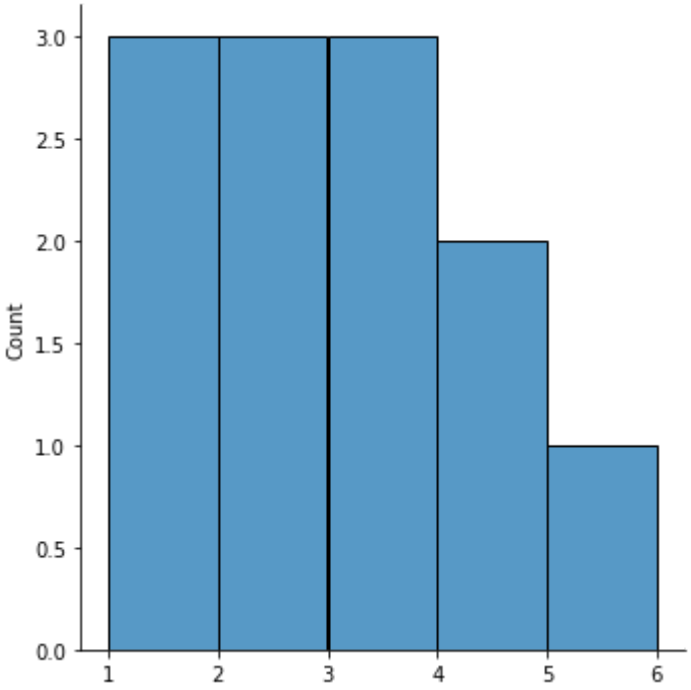
```
import numpy as np
from numpy import random
import matplotlib.pyplot as plt
exp=np.random.exponential(1,10)
count,bins,ignored=plt.hist(exp,5)
plt.show()
```



poisson

In [10]:

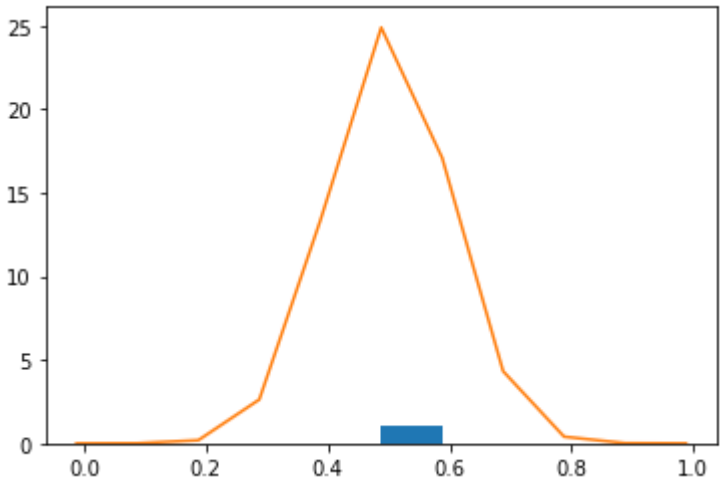
```
from numpy import random
import matplotlib.pyplot as plt
import seaborn as sns
sns.displot(random.poisson(lam=3,size=12))
plt.show()
```



Normal

In [6]:

```
import numpy as np
from numpy import random
import matplotlib.pyplot as plt
mu,sigma=0.5,0.1
s=np.random.normal(mu,sigma,1)
count,bins,ignored=plt.hist(s,10)
plt.plot(bins,1/sigma*np.sqrt(2*np.pi)*np.exp(-(bins-mu)**2/(2*sigma**2)))
plt.show()
```



In [ ]:

```

```