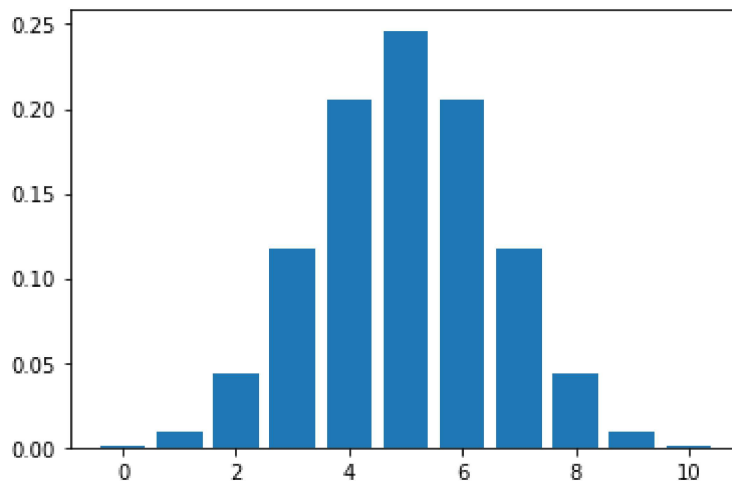


Binomial

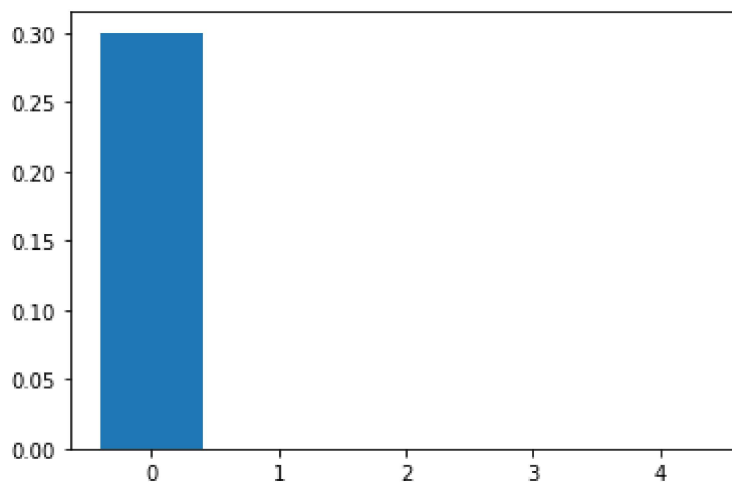
```
In [1]: from scipy.stats import binom
import matplotlib.pyplot as plt
```

```
In [3]: n = 10
p = 0.5
r_value = list(range(n+1))
dist = [binom.pmf(r,n,p) for r in r_value]
plt.bar(r_value,dist)
plt.show()
```



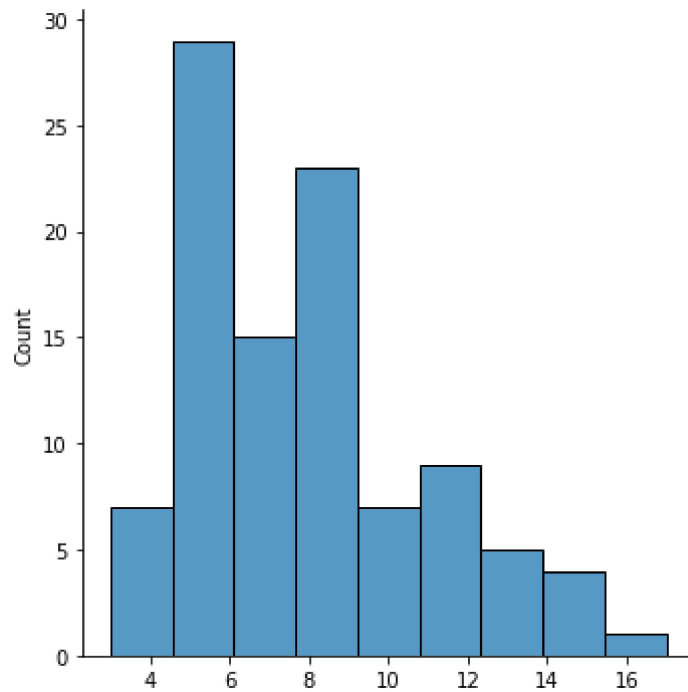
Bernoulli

```
In [5]: from scipy.stats import bernoulli
bd = bernoulli(0.7)
x = [0,4]
plt.bar(x,bd.pmf(x))
plt.show()
```



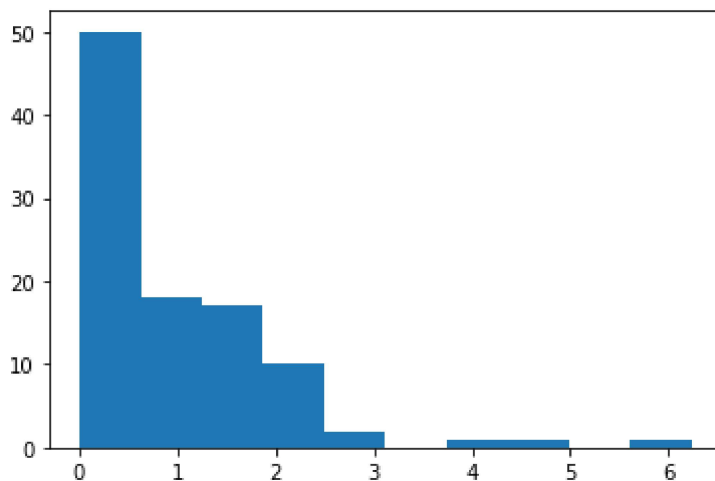
poisson

```
In [6]: from numpy import random
import matplotlib.pyplot as plt
import seaborn as sns
sns.displot(random.poisson(lam=8,size=100))
plt.show()
```



Exponenential

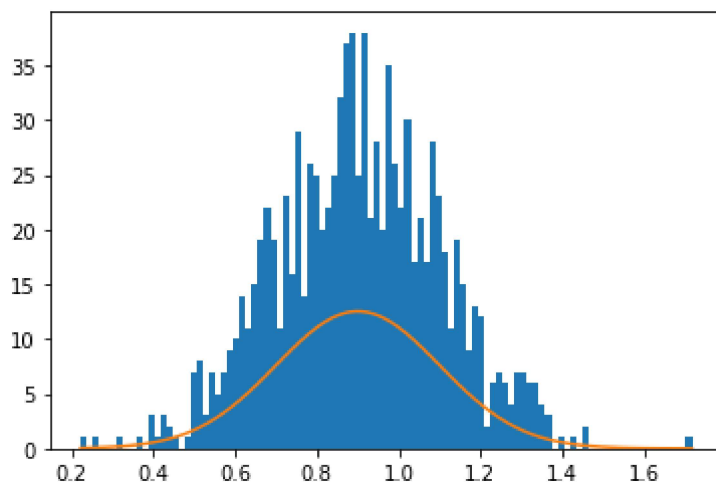
```
In [8]: import numpy as np
import matplotlib.pyplot as plt
exp = np.random.exponential(1,100)
count,bins,ignored = plt.hist(exp,10)
plt.show()
```



Normal Distribution

```
In [16]: import matplotlib.pyplot as plt
import numpy as np
mu,sigma = 0.9,0.2
s = np.random.normal(mu,sigma,1000)

count,bins,ignored = plt.hist(s,100)
plt.plot(bins, 1/sigma*np.sqrt(2*np.pi)*np.exp(-(bins-mu)**2/(2*sigma**2)))
plt.show()
```



In []: