1. Perform Binomial, Bernoulli distributions

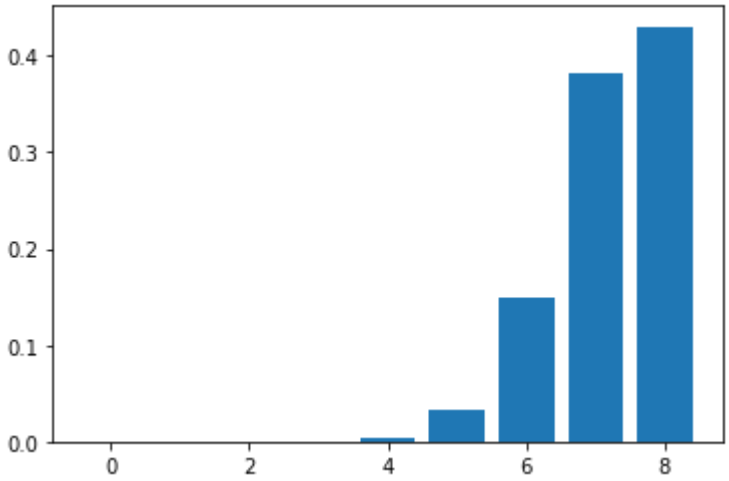
In [4]:

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

Binomial:

In [5]:

```
n=8
p=0.9
r_v=list(range(n+1))
dis=[binom.pmf(r,n,p) for r in r_v]
plt.bar(r_v,dis)
plt.show()
```



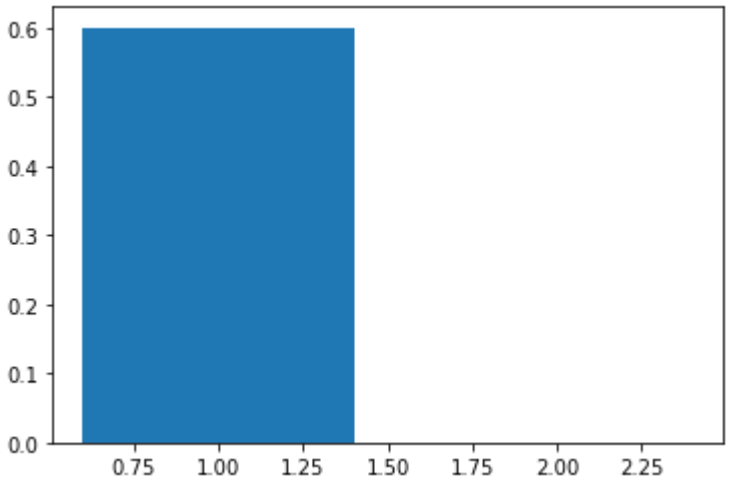
Bernoulli:

In [6]:

```
from scipy.stats import bernoulli
```

In [8]:

```
b=bernoulli(0.6)
a=[1,2]
plt.bar(a,b.pmf(a))
plt.show()
```



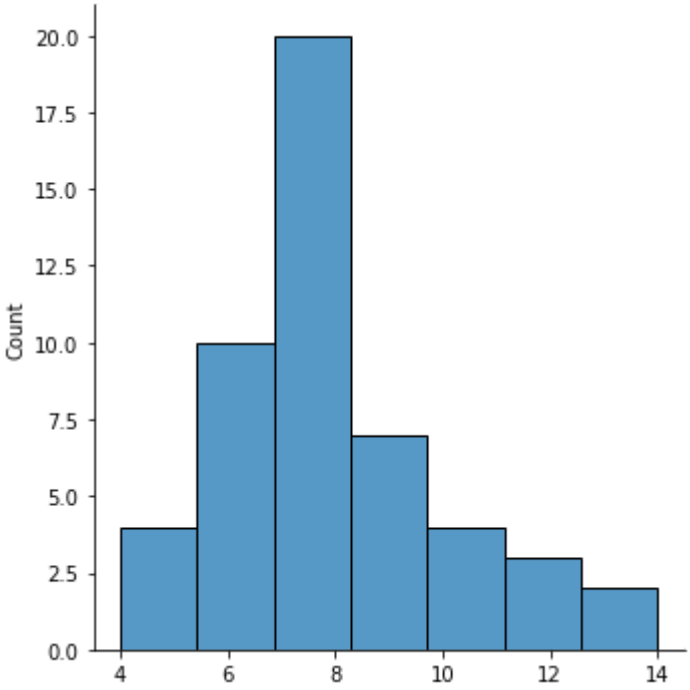
2. Perform Poisson distribution

In [9]:

```
from numpy import random
import seaborn as s
```

In [10]:

```
s.displot(random.poisson(lam=7,size=50))
plt.show()
```



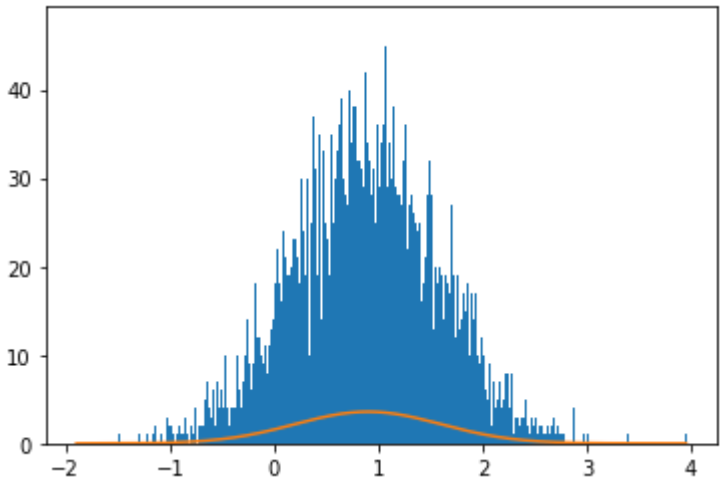
3. Perform Normal, Exponential distributions

In [12]:

```
import numpy as np
```

In [13]:

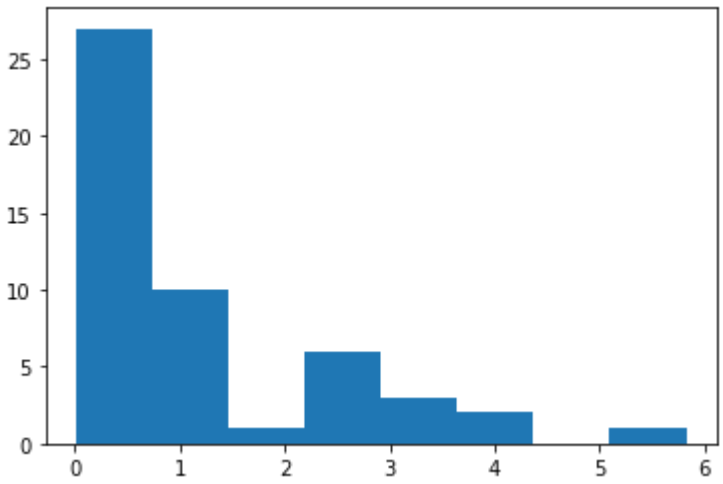
```
mu,sigma=0.9,0.7
s=np.random.normal(mu,sigma,10000)
count,bins,ignored=plt.hist(s,1000)
plt.plot(bins,1/sigma*np.sqrt(2*np.pi)*np.exp(-(bins-mu)**2/(2*sigma**2)))
plt.show()
```



Exponential:

In [15]:

```
t=np.random.exponential(1,50)
count,bins,ignored=plt.hist(t,8)
plt.show()
```



In [ ]:

```

```