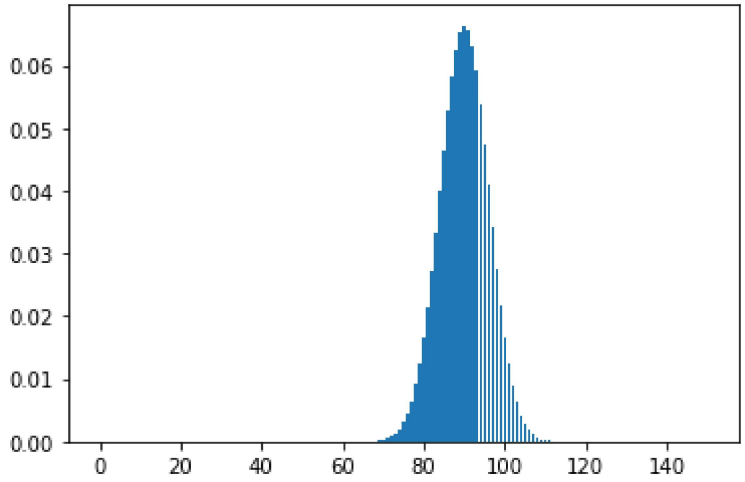
Santhosh Gopi B

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

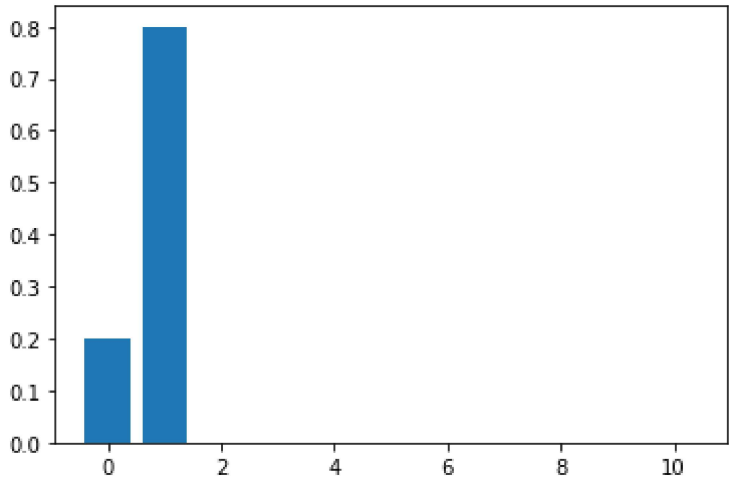
Binomial

In [9]:
```
n=150
p=0.6
r=list(range(n+1))
d=[binom.pmf(i,n,p) for i in r]
plt.bar(r,d)
plt.show()
```



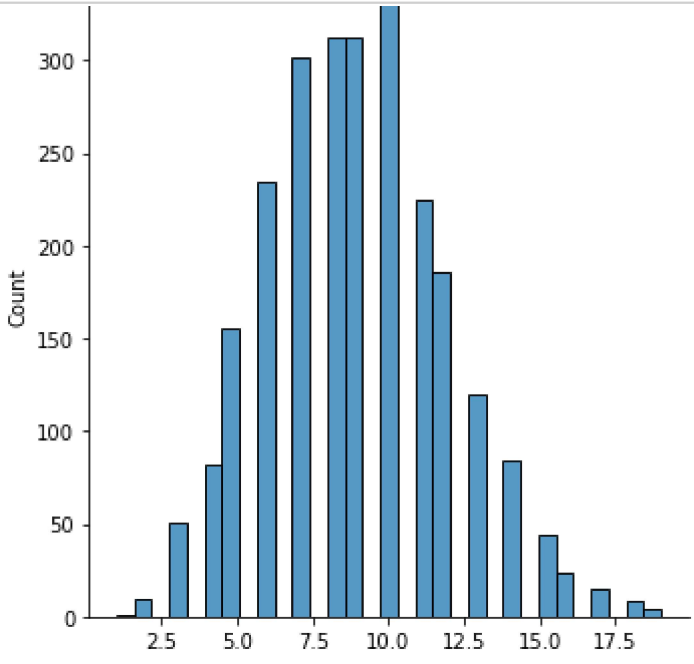
Bernoulli

In [8]:
```
from scipy.stats import bernoulli
b=bernoulli(0.8)
x=[0,1,2,3,4,5,6,7,8,9,10]
plt.bar(x,b.pmf(x))
plt.show()
```



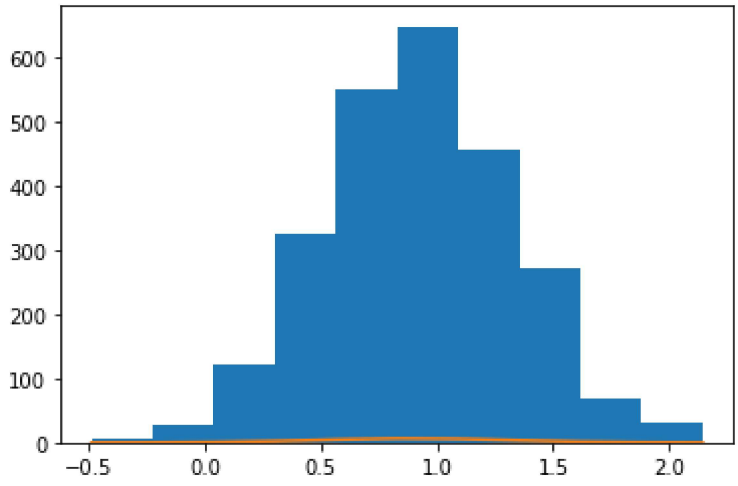
Possion

In [4]:
```
from numpy import random
import seaborn as sns
sns.displot(random.poisson(lam=9,size=2500))
```



Normal

In [5]:
```
mu,si=0.9,0.4
s=np.random.normal(mu,si,2500)
counts,bins,ignored=plt.hist(s,10)
plt.plot(bins,1/si*np.sqrt(2*np.pi)*np.exp(-(bins-mu)**2/(2*si**2)))
plt.show()
```



Exponential

In [6]:
```
exp=np.random.exponential(1,30000)
count,bins,ignored=plt.hist(exp,8)
plt.show()
```