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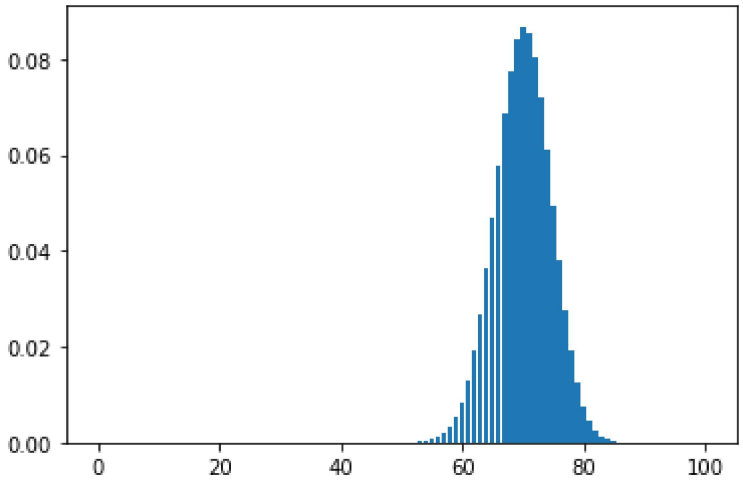
20104028

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

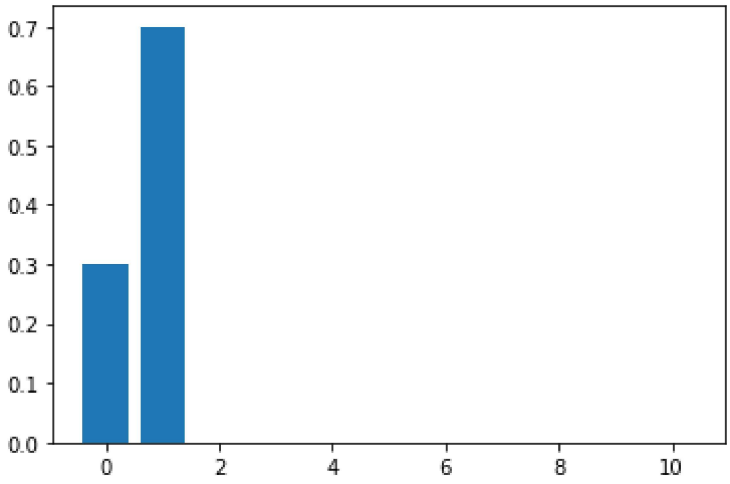
Binomial

In [3]:
```
n=100
p=0.7
r=list(range(n+1))
d=[binom.pmf(i,n,p) for i in r]
plt.bar(r,d)
plt.show()
```



Bernoulli

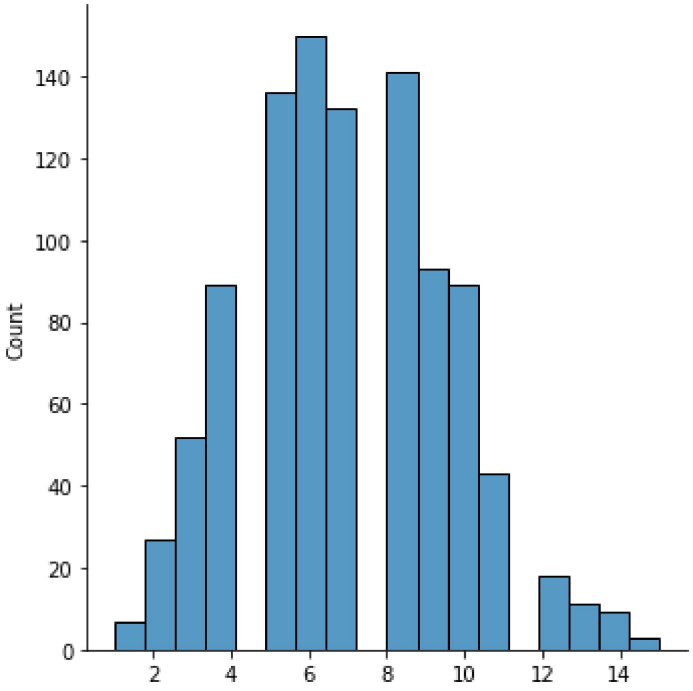
In [4]:
```
from scipy.stats import bernoulli
b=bernoulli(0.7)
x=[0,1,2,3,4,5,6,7,8,9,10]
plt.bar(x,b.pmf(x))
plt.show()
```



Possion

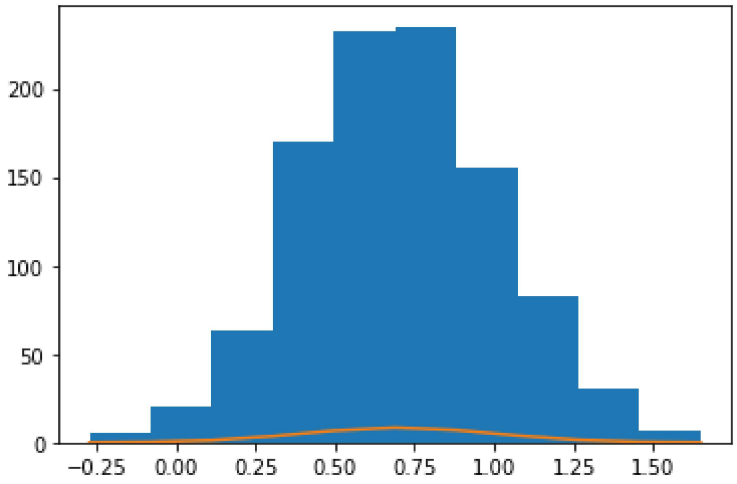
In [8]:
```
from numpy import random
import seaborn as sns
sns.displot(random.poisson(lam=7,size=1000))
```

Out[8]: <seaborn.axisgrid.FacetGrid at 0x28081279c10>



Normal

In [6]:
```
mu,si=0.7,0.3
s=np.random.normal(mu,si,1000)
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 [9]:
```
exp=np.random.exponential(1,10000)
count,bins,ignored=plt.hist(exp,7)
plt.show()
```