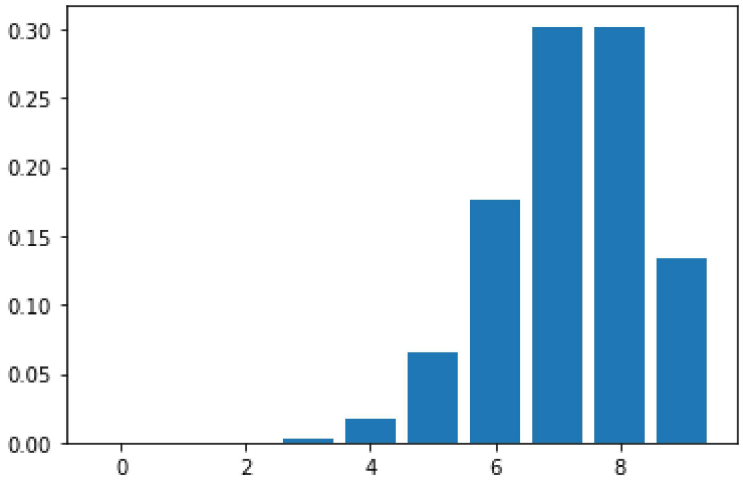
1.Binomial

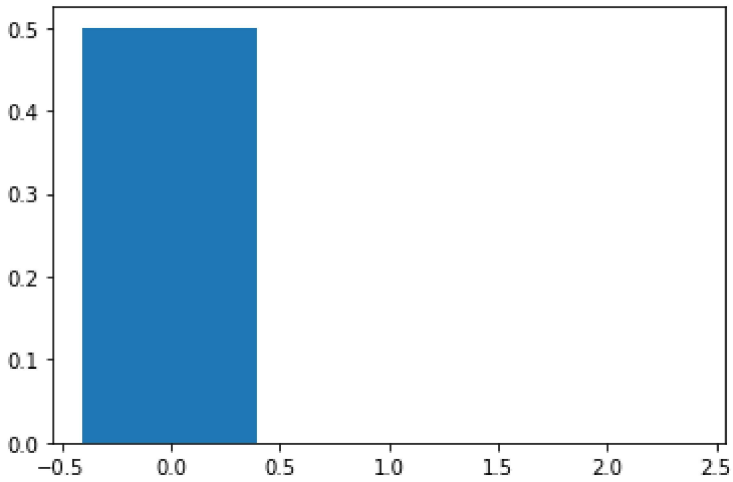
In [3]:
```
from scipy.stats import binom
import matplotlib.pyplot as plt
```

In [11]:
```
n=9
p=0.8
rvalues=list(range(n+1))
dist=[binom.pmf(r,n,p)for r in rvalues]
plt.bar(rvalues,dist)
plt.show()
```



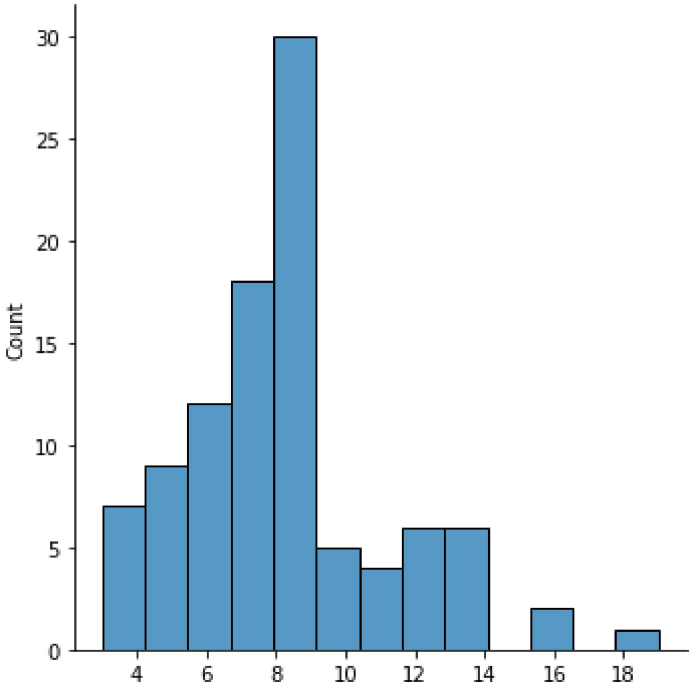
bernoulli

In [12]:
```
from scipy.stats import bernoulli
bd=bernoulli(0.5)
x=[0,2]
plt.bar(x,bd.pmf(x))
plt.show()
```



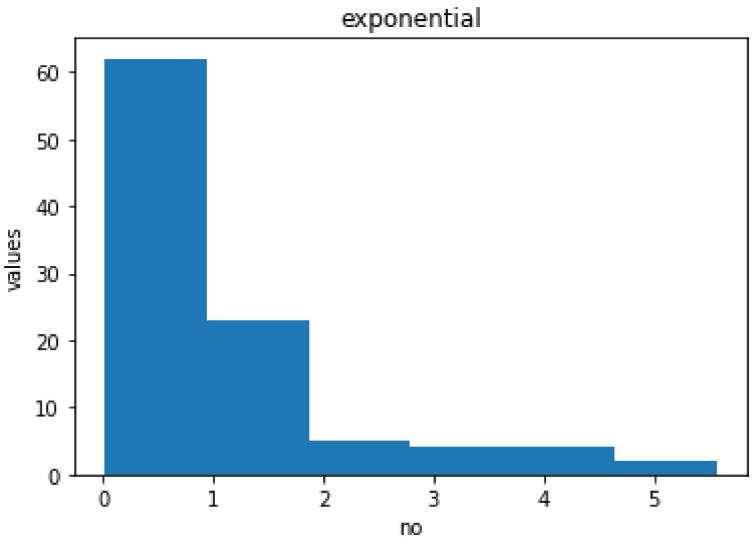
2.Poisson distribution

In [13]:
```
from numpy import random
import matplotlib.pyplot as plt
import seaborn as sns
sns.displot(random.poisson(lam=8,size=100))
plt.show()
```



3.exponential distribution

In [14]:
```
import numpy as np
import matplotlib.pyplot as plt
exp=np.random.exponential(1,100)
count,bins,ignored=plt.hist(exp,6)
plt.title("exponential")
plt.xlabel("no")
plt.ylabel("values")
plt.show()
```



normal distribution

In [10]:

```
import matplotlib.pyplot as plt
mu,sigma=0.5,0.1
s=np.random.normal(mu,sigma,1000)
count,bins,ignored=plt.hist(s,100,color='olive')
#distribution curve
plt.plot(bins,1/sigma*np.sqrt(2*np.pi)*np.exp(-(bins-mu)**2/(2*sigma**2)),color='deeppi

plt.show()
```