In [1]:
```python
import numpy as np
import pandas as pd
from scipy.stats import binom
import matplotlib.pyplot as plt
```
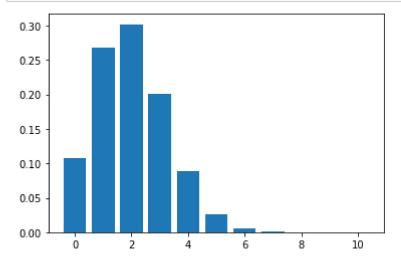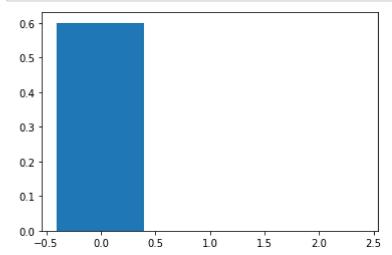
In [5]:
```python
n=10
p=0.2
r_values=list(range(n+1))
dist=[binom.pmf(r,n,p) for r in r_values]
plt.bar(r_values,dist)
plt.show()
```
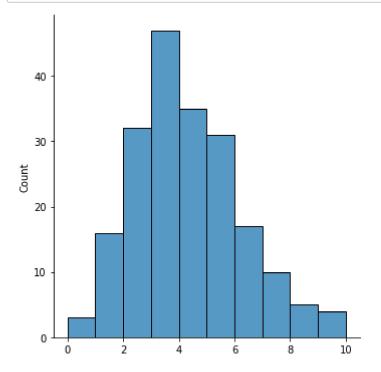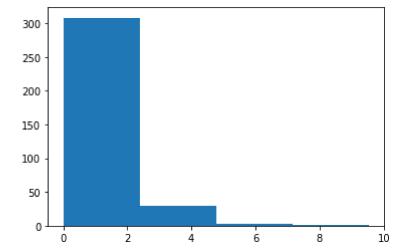


In [8]:
```python
from scipy.stats import bernoulli
bd=bernoulli(0.4)
x=[0,2]
plt.bar(x,bd.pmf(x))
plt.show()
```
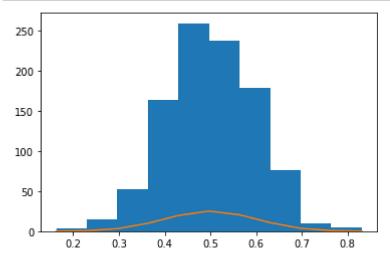
In [10]:
```python
from numpy import random
import matplotlib.pyplot as plt
import seaborn as sns
sns.displot(random.poisson(lam=4,size=200))
plt.show()
```



In [12]:
```python
import numpy as np
import matplotlib.pyplot as plt
exp=np.random.exponential(1,340)
count,bins,ignored=plt.hist(exp,4)
plt.show()
```

In [13]:
```python
import matplotlib.pyplot as plt
import numpy as np
mu,sigma=0.5,0.1
s=np.random.normal(mu,sigma,1000)
count,bins,ignored=plt.hist(s,10)
plt.plot(bins,1/sigma*np.sqrt(2*np.pi)*np.exp(-(bins-mu)**2/(2*sigma**2)))
plt.show()
```



In [ ]: