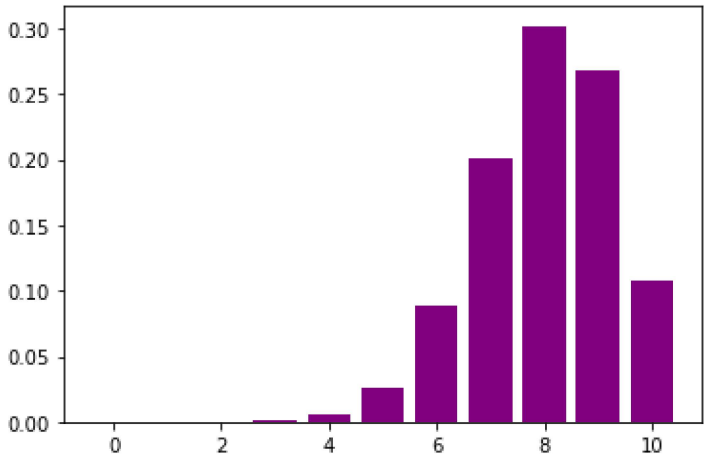
In [1]:
```
import numpy as np
import pandas as pd
```

In [2]:
```
from scipy.stats import binom
import matplotlib.pyplot as plt
```

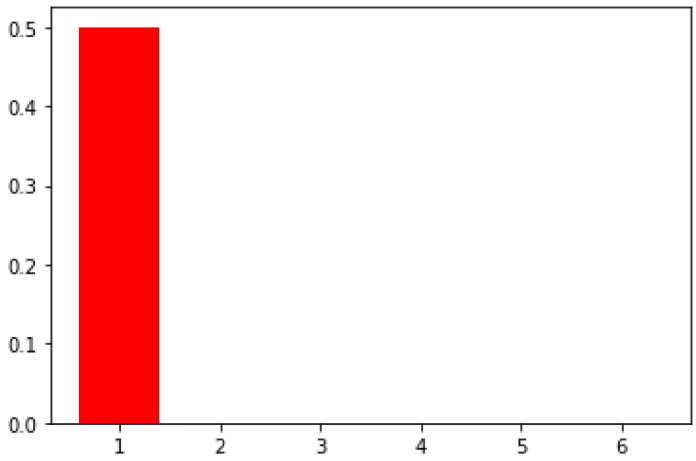
```
Binomial
```

In [5]:
```
a=10
b=0.8
r_values=list(range(a+1))
dist=[binom.pmf(i,a,b) for i in r_values]
plt.bar(r_values,dist,color='purple')
plt.show()
```



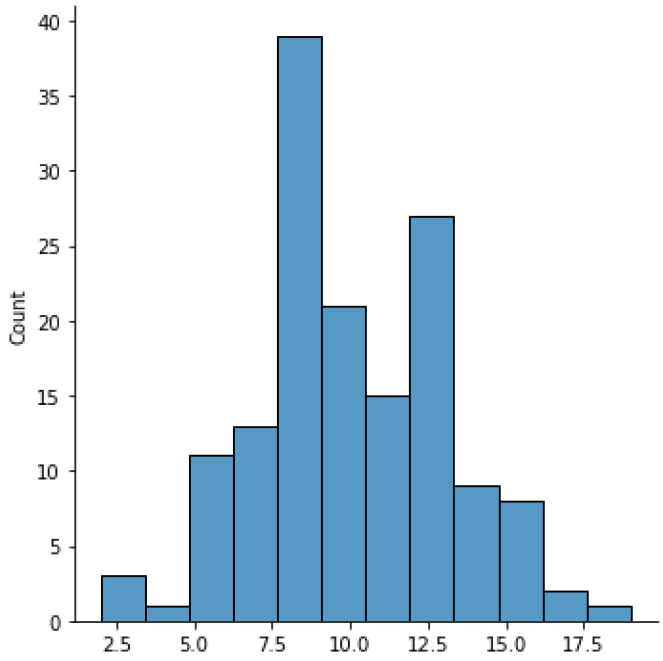

```
Bernoullis
```

In [8]:
```
from scipy.stats import bernoulli
bd=bernoulli(0.5)
c=[1,6]
plt.bar(c,bd.pmf(c),color='red')
plt.show()
```



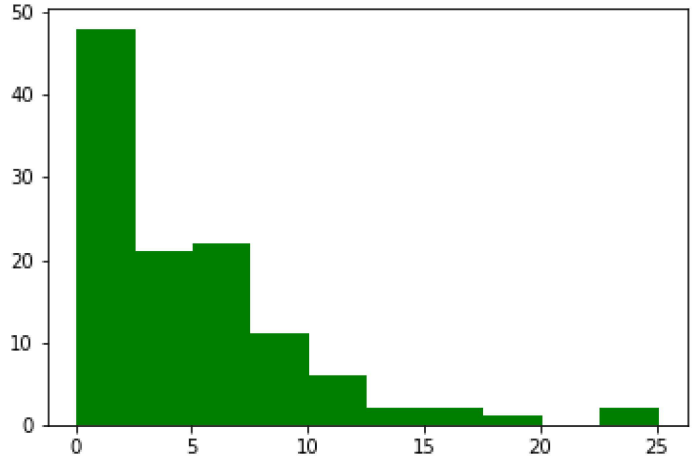
Poisson

In [10]:
```
from numpy import random
import matplotlib.pyplot as plt
import seaborn as sns
sns.displot(random.poisson(lam=10,size=150))
plt.show()
```



Exponential

In [13]:
```
import numpy as np
import matplotlib.pyplot as plt
exp=np.random.exponential(5,115)
count,bins,ignored=plt.hist(exp,10,color='green')
plt.show()
```



In [ ]:
```
Normal
```

In [15]:
```
import matplotlib.pyplot as plt
import numpy as np
mu,sigma=0.10,0.5
s=np.random.normal(mu,sigma,150)
count,bins,ignored=plt.hist(s,20)
plt.plot(bins,1/sigma*np.sqrt(2*np.pi)*np.exp(-(bins-mu)**2/(2*sigma**2)),color='blac
plt.show()
```