[1]:
```
import numpy as np
array=np.random.randint(1,100,16)
array
```

[1]:
```
array([86, 82, 86, 95, 11, 60, 58, 90, 77, 73, 98, 66, 42, 81, 10, 27],
      dtype=int32)
```

[2]:
```
array.mean()
```

[2]:
```
np.float64(65.125)
```

[3]:
```
np.percentile(array,25)
```

[3]:
```
np.float64(54.0)
```

[4]:
```
np.percentile(array,50)
```

[4]:
```
np.float64(75.0)
```

[5]:
```
np.percentile(array,75)
```

[5]:
```
np.float64(86.0)
```

[6]:
```
np.percentile(array,100)
```

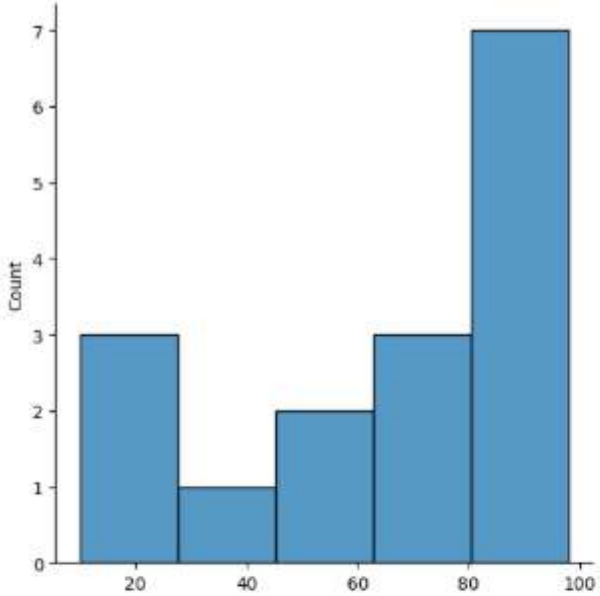
[6]:
```
np.float64(98.0)
```

[8]:
```
def outDetection(array):
   sorted(array)
   Q1,Q3=np.percentile(array,[25,75])
   IQR=Q3-Q1
   lr=Q1-(1.5*IQR)
   ur=Q3+(1.5*IQR)
   return lr,ur
lr,ur=outDetection(array)
lr,ur
```

[8]:
```
(np.float64(6.0), np.float64(134.0))
```

[9]:
```
import seaborn as sns
%matplotlib inline
sns.displot(array)
```

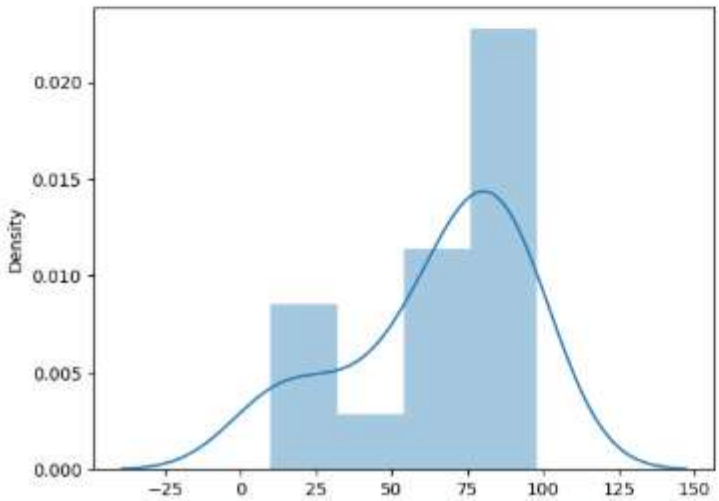
[9]:
```
<seaborn.axisgrid.FacetGrid at 0x1d78b9c6980>
```



[10]:
```
sns.distplot(array)
```

```
C:\Users\nivet\AppData\Local\Temp\ipykernel_24788\2799961108.py:1: UserWarning:

`distplot` is a deprecated function and will be removed in seaborn v0.14.0.

Please adapt your code to use either `displot` (a figure-level function with
similar flexibility) or `histplot` (an axes-level function for histograms).

For a guide to updating your code to use the new functions, please see
https://gist.github.com/mwaskom/de44147ed2974457ad6372750bbe5751

  sns.distplot(array)
```

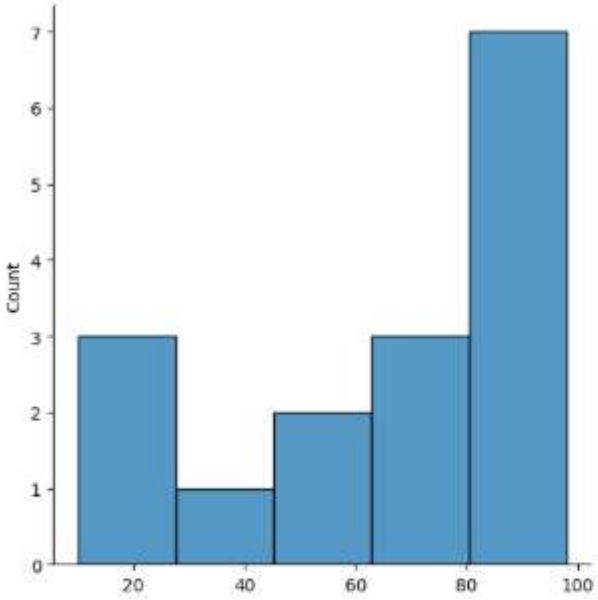
[10]:
```
<Axes: ylabel='Density'>
```



[11]:
```
array([86, 82, 86, 95, 11, 60, 58, 90, 77, 73, 98, 66, 42, 81, 10, 27],
      dtype=int32)
```

[12]:
```
sns.displot(new_array)
```

[12]:
```
<seaborn.axisgrid.FacetGrid at 0x1d790bb1f90>
```



[13]:
```
lr1,ur1=outDetection(new_array)
lr1,ur1
```

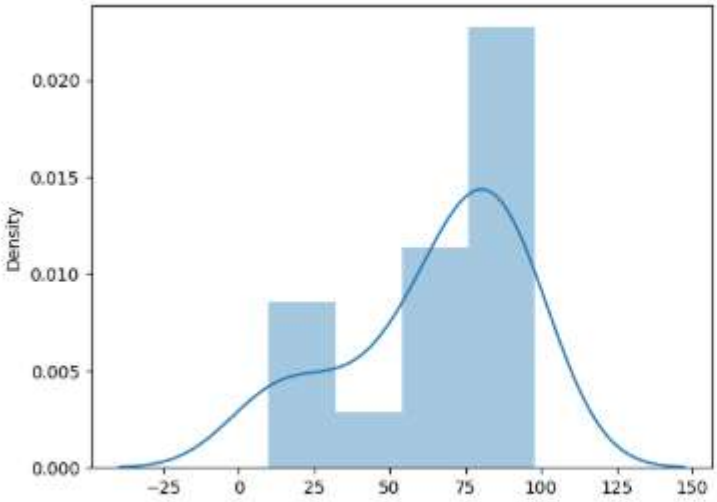
[13]:
```
(np.float64(6.0), np.float64(134.0))
```

[14]:
```
final_array=new_array[(new_array>lr1) & (new_array<ur1)]
final_array
```

[14]:
```
array([86, 82, 86, 95, 11, 60, 58, 90, 77, 73, 98, 66, 42, 81, 10, 27],
      dtype=int32)
```

[15]:
```
sns.distplot(final_array)
```

[15]: <Axes: ylabel='Density'>



[ ]: