```
#4

import numpy as np
array=np.random.randint(1,100,16)
array
array.mean()
np.percentile(array,25)
np.percentile(array,50)
np.percentile(array,75)
np.percentile(array,100)
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

import seaborn as sns
%matplotlib inline
sns.displot(array)
sns.distplot(array)
new_array=array[(array>lr) & (array<ur)]
new_array
sns.displot(new_array)
lr1,ur1=outDetection(new_array)
lr1,ur1
final_array=new_array[(new_array>lr1) & (new_array<ur1)]
final_array
sns.distplot(final_array)
```

```
/tmp/ipython-input-1810417697.py:25: 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)
/tmp/ipython-input-1810417697.py:33: 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(final_array)
<Axes: ylabel='Count'>
```