In [15]: sns.boxplot(age)

Out[15]:

EXPRIMENT - 10

measure of central Tendency

```
In [1]:
age = [45,63,32,12,5,61,15,14,18,19,94,65,4,28,65]
In [2]:
import numpy as np
In [3]:
print(np.mean(age))
36.0
In [4]:
print(np.median(age))
28.0
In [5]:
print(np.mode(age))
AttributeError
                                        Traceback (most recent call last)
Cell In[5], line 1
----> 1 print(np.mode(age))
File C:\ProgramData\anaconda3\Lib\site-packages\numpy\_init_.py:320, in __getattr__(attr)
    317
           from .testing import Tester
   318
           return Tester
--> 320 raise AttributeError("module {!r} has no attribute "
                             "{!r}".format(__name__, attr))
AttributeError: module 'numpy' has no attribute 'mode'
In [8]:
import statistics as st
In [10]:
print(st.mean(age))
36
In [12]:
print(st.median(age))
28
In [9]:
print(st.mode(age))
65
In [14]:
import seaborn as sns
```

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```
<Axes: >
 80
 60 -
 40
 20 -
```

```
In [18]:
q1,q3 = np.percentile(age,[25,27])
print("q1=",q1)
print("q3=",q3)
q1= 14.5
q3= 14.7800000000000001
In [19]:
iqr = q3-q1
Out[19]:
0.28000000000000114
In [21]:
lf = q1-1.5*(iqr)
1 f
Out[21]:
14.07999999999998
In [22]:
hf = q3+1.5*(iqr)
Out[22]:
15.2000000000000003
In [23]:
print("mean",np.mean(age))
mean 36.0
In [34]:
def variance(data):
    n=len(data)
     mean= sum(data)/n
```

dev=[(x-mean)**2 for x in data] var=sum(dev)/(n-1) return var

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In [35]:	
variance(age)	
Out[35]:	
761.4285714285714	
In [39]:	
np.var(age)	
Out[39]:	
710.6666666666666	
In [33]:	
statistics.variance(age)	
Out[33]:	
761.4285714285714	
In [36]:	
import math	
In [37]:	
<pre>math.sqrt(statistics.variance(age))</pre>	
Out[37]:	
27.593995205996748	
In [38]:	
np.std(age)	
Out[38]:	
26.65833203084294	
In []:	