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Exploratory Data Analysis

In [5]:

```
import pandas as pd
import numpy as np
import seaborn as sns
```

In [6]:

```
data=pd.read_csv("C:/Users/Prathyu Lachireddy/Desktop/BP/Students.csv")
data
```

Out[6]:

	gender	race/ethnicity	parental level of education	lunch	test preparation course	math score	reading score	writing score
0	female	group B	bachelor's degree	standard	none	72	72	74
1	female	group C	some college	standard	completed	69	90	88
2	female	group B	master's degree	standard	none	90	95	93
3	male	group A	associate's degree	free/reduced	none	47	57	44
4	male	group C	some college	standard	none	76	78	75
...
995	female	group E	master's degree	standard	completed	88	99	95
996	male	group C	high school	free/reduced	none	62	55	55
997	female	group C	high school	free/reduced	completed	59	71	65
998	female	group D	some college	standard	completed	68	78	77
999	female	group D	some college	free/reduced	none	77	86	86

1000 rows × 8 columns

In [8]:



```
student=data.drop(['race/ethnicity','parental level of education'],axis=1)
student
```

Out[8]:

	gender	lunch	test preparation course	math score	reading score	writing score
0	female	standard	none	72	72	74
1	female	standard	completed	69	90	88
2	female	standard	none	90	95	93
3	male	free/reduced	none	47	57	44
4	male	standard	none	76	78	75
...
995	female	standard	completed	88	99	95
996	male	free/reduced	none	62	55	55
997	female	free/reduced	completed	59	71	65
998	female	standard	completed	68	78	77
999	female	free/reduced	none	77	86	86

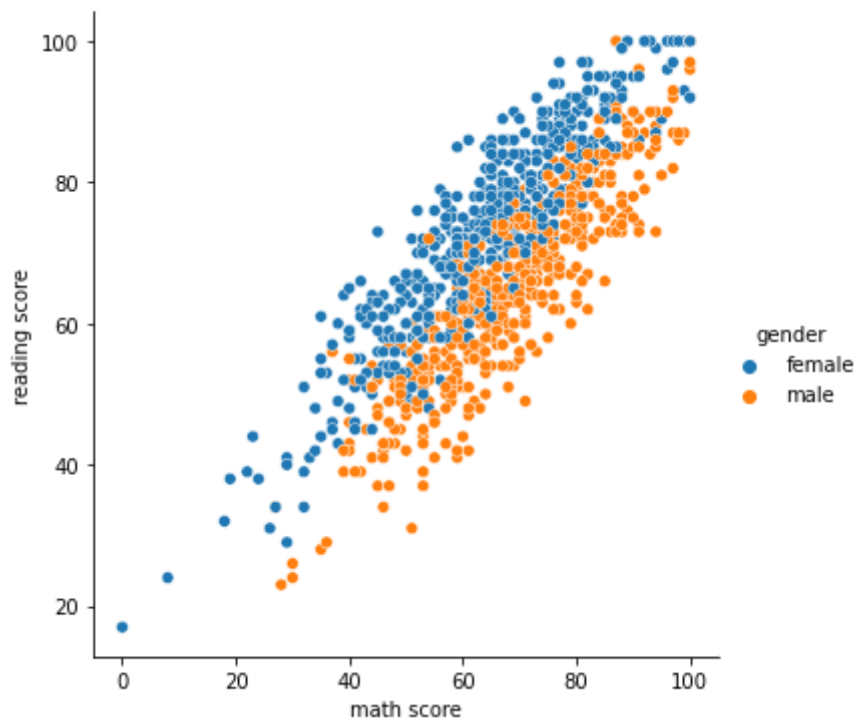
1000 rows × 6 columns

In [9]:

```
sns.relplot(x='math score',y='reading score',hue='gender',data=student)
```

Out[9]:

```
<seaborn.axisgrid.FacetGrid at 0x1ea504332b0>
```



In [10]:

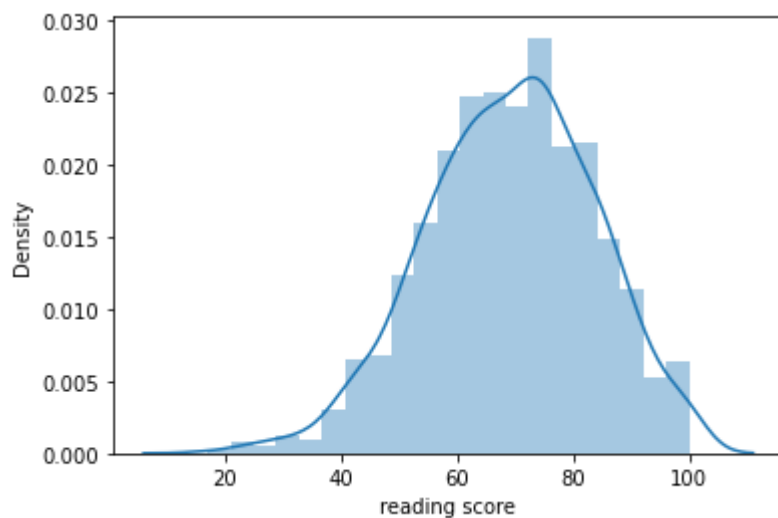
```
sns.distplot(student['reading score'])
```

C:\Users\Prathyu Lachireddy\anaconda3\lib\site-packages\seaborn\distribution s.py:2551: FutureWarning: `distplot` is a deprecated function and will be removed in a future version. Please adapt your code to use either `displot` (a figure-level function with similar flexibility) or `histplot` (an axes-level function for histograms).

```
warnings.warn(msg, FutureWarning)
```

Out[10]:

```
<AxesSubplot:xlabel='reading score', ylabel='Density'>
```



In [11]:

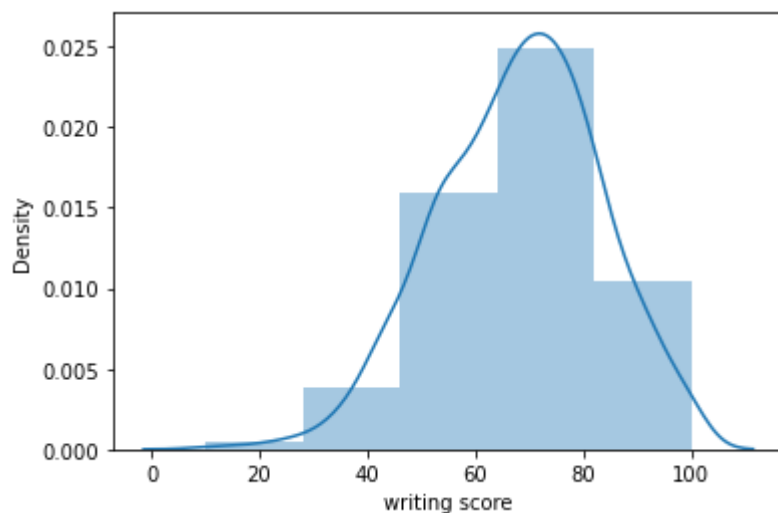
```
sns.distplot(student['writing score'],bins=5)
```

C:\Users\Prathyu Lachireddy\anaconda3\lib\site-packages\seaborn\distribution s.py:2551: FutureWarning: `distplot` is a deprecated function and will be removed in a future version. Please adapt your code to use either `displot` (a figure-level function with similar flexibility) or `histplot` (an axes-level function for histograms).

```
warnings.warn(msg, FutureWarning)
```

Out[11]:

<AxesSubplot:xlabel='writing score', ylabel='Density'>

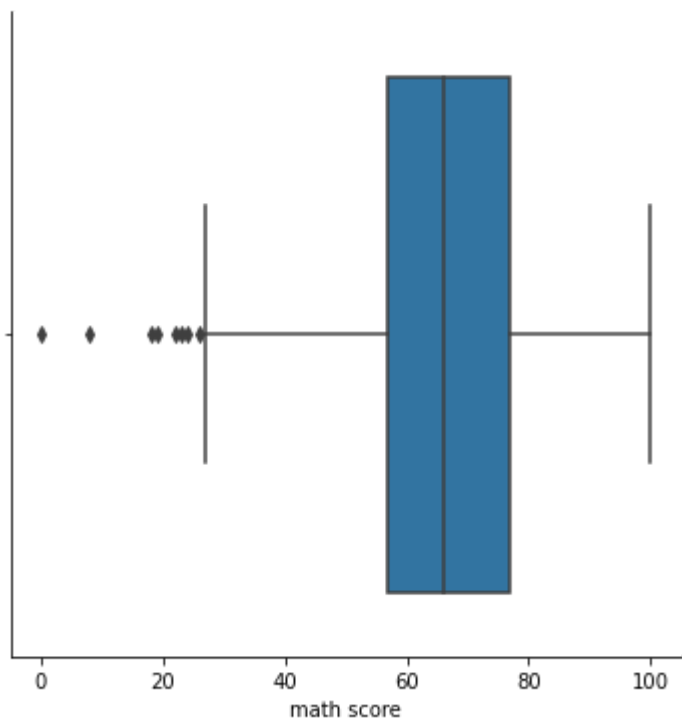


In [12]:

```
sns.catplot(x='math score', kind='box', data=student)
```

Out[12]:

```
<seaborn.axisgrid.FacetGrid at 0x1ea4e368070>
```



In []: