In [1]:

```python
import numpy as np
import pandas as pd
import matplotlib.pyplot as plt
import seaborn as sns
```

In [2]:

```python
df= pd.read_csv("StudentsPerformance.csv")
df
```

Out[2]:

| | 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 [3]:

```python
df.head()
```

Out[3]:

| | 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 |

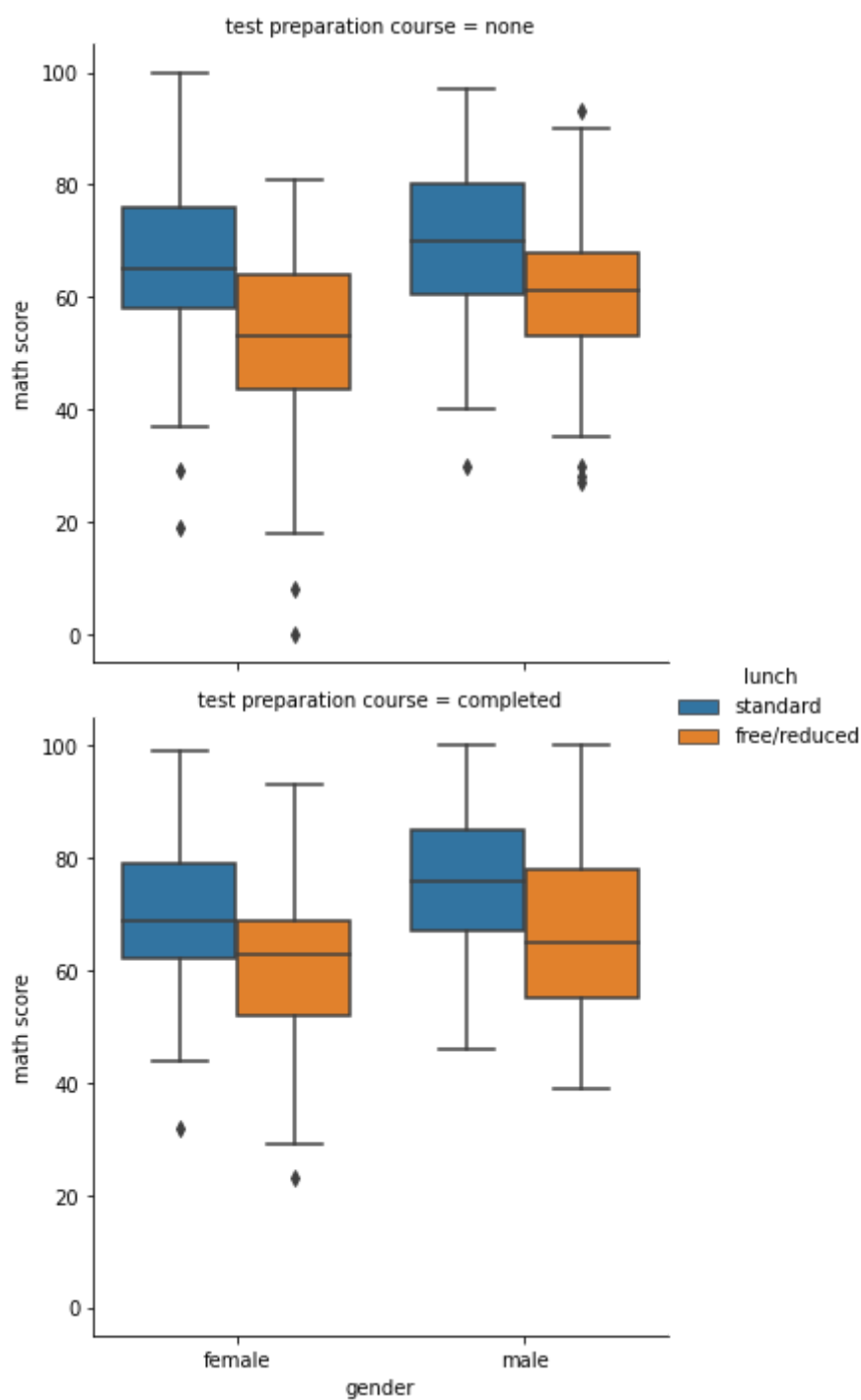# catplot

In [6]:

```
sns.catplot(data=df,x="gender",y="math score",kind="box",
            hue="lunch",row="test preparation course")
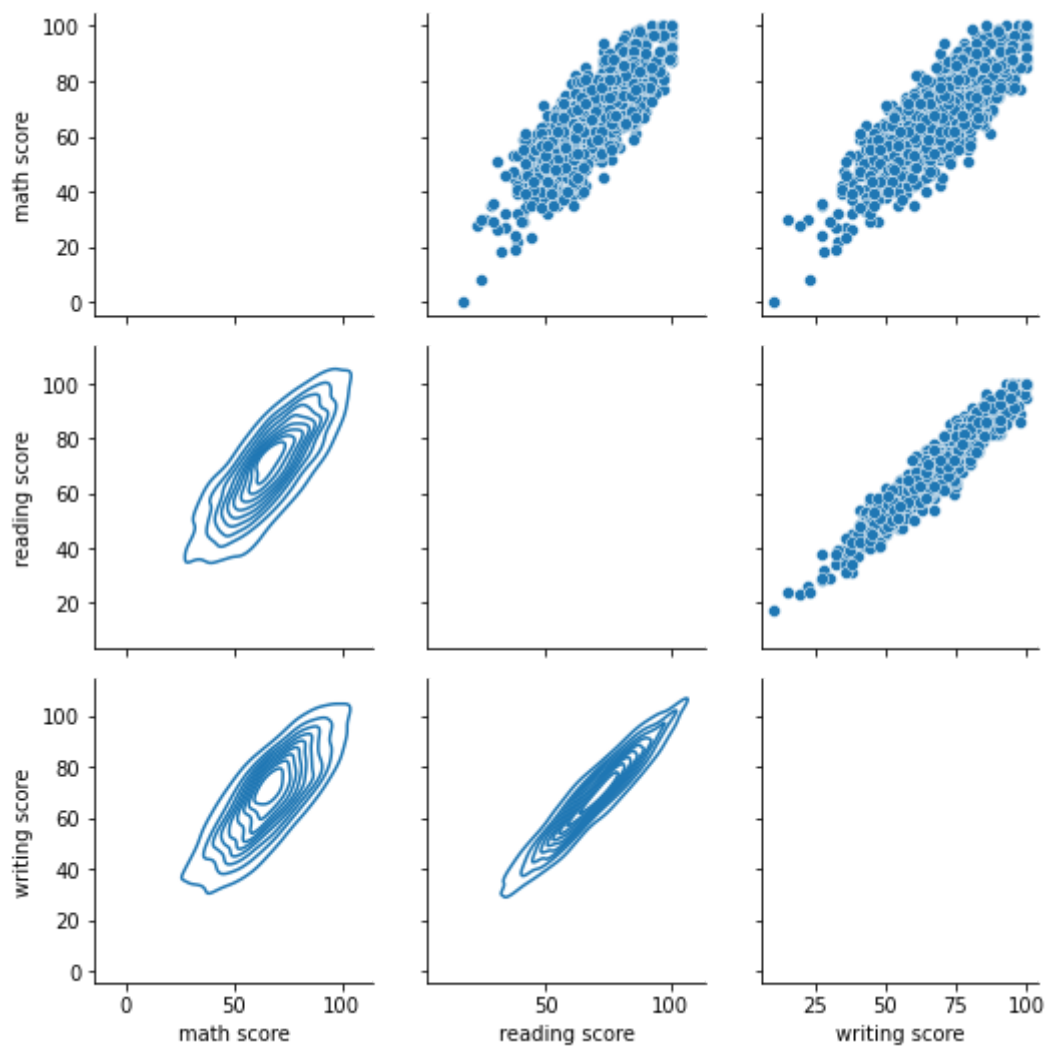```

Out[6]:

`<seaborn.axisgrid.FacetGrid at 0x24a6ff45400>`



# pairgrid

In [12]:

```
g=sns.PairGrid(df,hue)
g=g.map_upper(sns.scatterplot)
g=g.map_diag(sns.scatterplot)
g=g.map_lower(sns.kdeplot)
```



In [ ]: