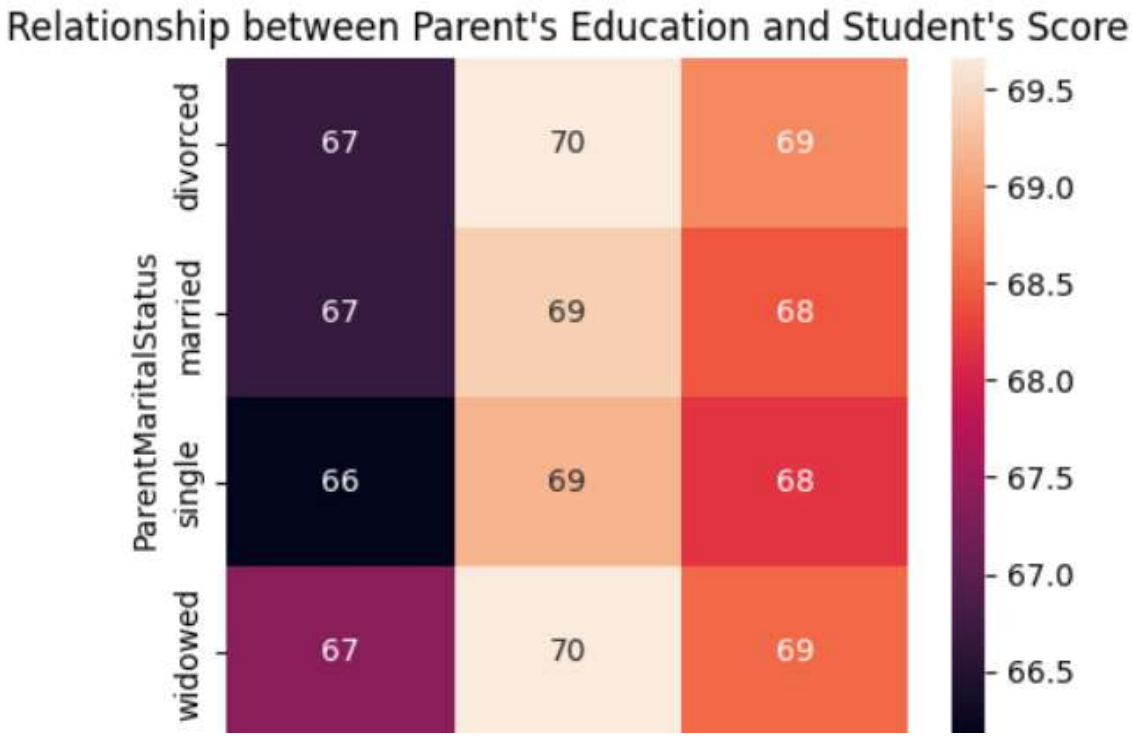
In [46]:

```
gb1 = df.groupby("ParentMaritalStatus").agg({"MathScore": 'mean', "ReadingScore":'mean', "WritingScore":'mean'})
print(gb1)
```

ParentMaritalStatus	MathScore	ReadingScore	WritingScore
divorced	66.691197	69.655011	68.799146
married	66.657326	69.389575	68.420981
single	66.165704	69.157250	68.174440
widowed	67.368866	69.651438	68.563452

In [50]:

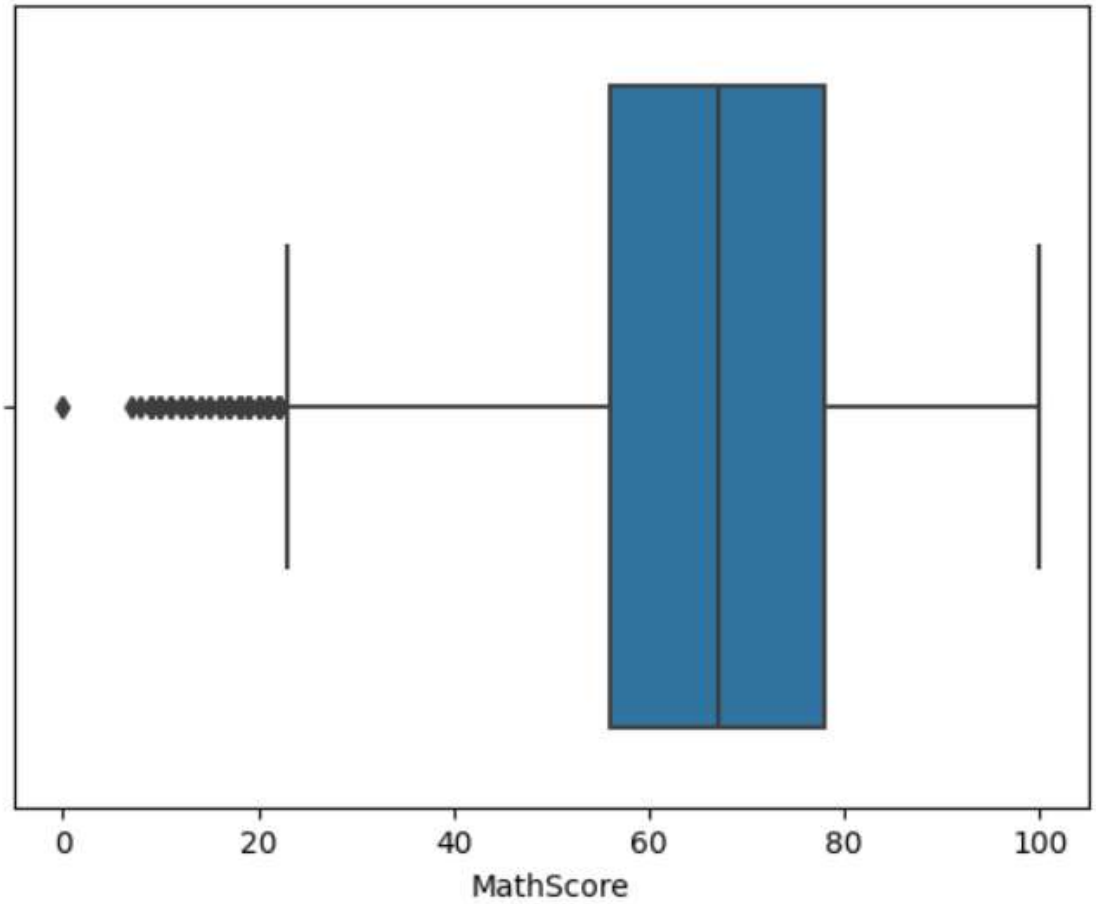
```
plt.figure(figsize =(5,4))
sns.heatmap(gb1, annot = True)
plt.title("Relationship between Parent's Education and Student's Score")
plt.show()
```



Dedecting outlier

In [56]:

```
sns.boxplot(data =df, x= "MathScore")
plt.show()
```



In [48]:

```
plt.figure(figsize = (5,4.5))
ax = sns.countplot(data =df, x ="Gender")
ax.bar_label(ax.containers[0])
plt.title("Gender Distribution")
plt.show()
```