Categorical Plot

1. Boxplot
2. violenplot
3. Countplot
4. Barplot

In [1]:
```
import numpy as np
import pandas as pd
import matplotlib.pyplot as plt
import seaborn as sns
```

In [2]:
```
df= pd.read_csv("C:/Users/anirb/Downloads/archive (5).zip")
```

In [3]:
```
df
```

Out[3]:

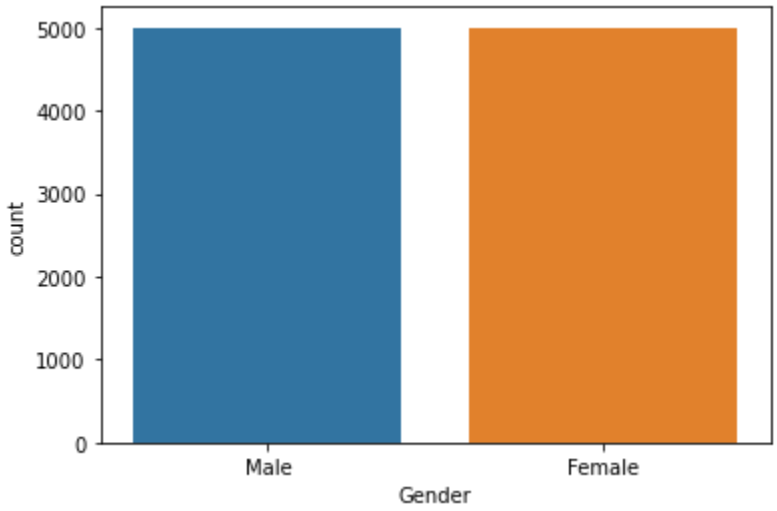
	Gender	Height	Weight
0	Male	73.847017	241.893563
1	Male	68.781904	162.310473
2	Male	74.110105	212.740856
3	Male	71.730978	220.042470
4	Male	69.881796	206.349801
...	...	...	...
9995	Female	66.172652	136.777454
9996	Female	67.067155	170.867906
9997	Female	63.867992	128.475319
9998	Female	69.034243	163.852461
9999	Female	61.944246	113.649103

10000 rows × 3 columns

In [4]:
```
sns.countplot("Gender",data= df)
```

```
C:\Users\anirb\anaconda3\lib\site-packages\seaborn\_decorators.py:36: FutureWarning: Pass
the following variable as a keyword arg: x. From version 0.12, the only valid positional a
rgument will be `data`, and passing other arguments without an explicit keyword will resul
t in an error or misinterpretation.
  warnings.warn(
```

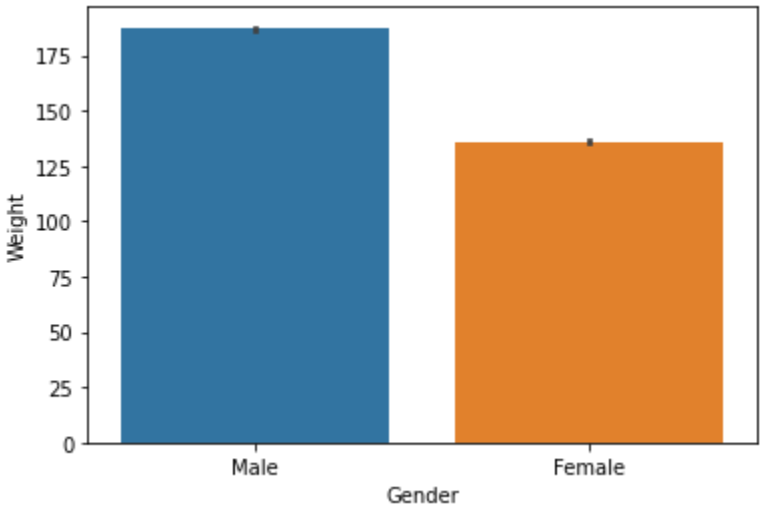
Out[4]:
```
<AxesSubplot:xlabel='Gender', ylabel='count'>
```



Barplot

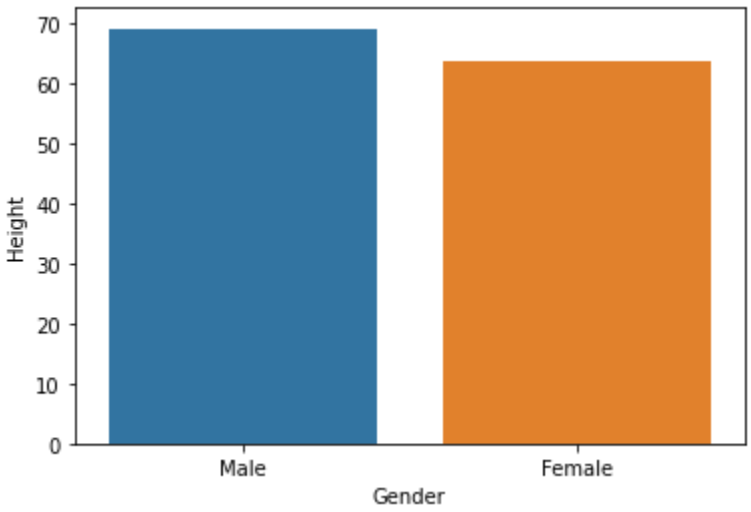
In [5]:
```
sns.barplot(x= 'Gender',y= 'Weight',data= df)
```

Out[5]:
```
<AxesSubplot:xlabel='Gender', ylabel='Weight'>
```



In [6]:
```
sns.barplot(x= 'Gender',y= 'Height',data= df)
```

Out[6]:
```
<AxesSubplot:xlabel='Gender', ylabel='Height'>
```



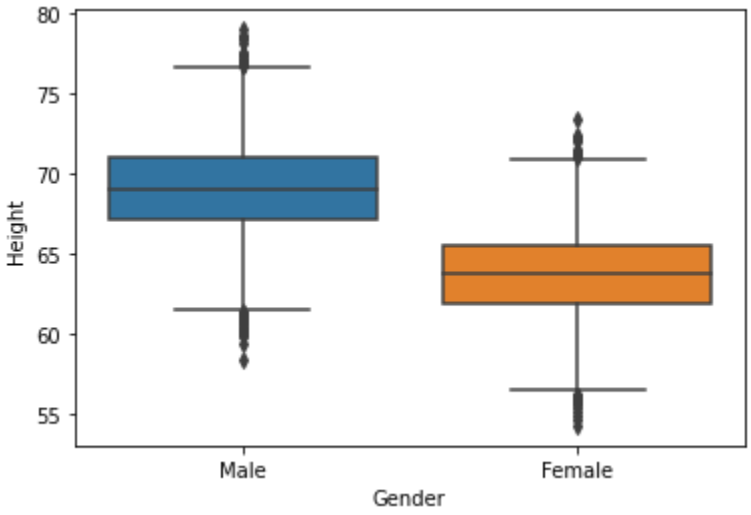
Box plot

Boxplot is a graph that presents information from five number summary.

In [7]:
```
sns.boxplot('Gender','Height',data= df)
```

```
C:\Users\anirb\anaconda3\lib\site-packages\seaborn\_decorators.py:36: FutureWarning: Pass
the following variables as keyword args: x, y. From version 0.12, the only valid positiona
l argument will be `data`, and passing other arguments without an explicit keyword will re
sult in an error or misinterpretation.
  warnings.warn(
```

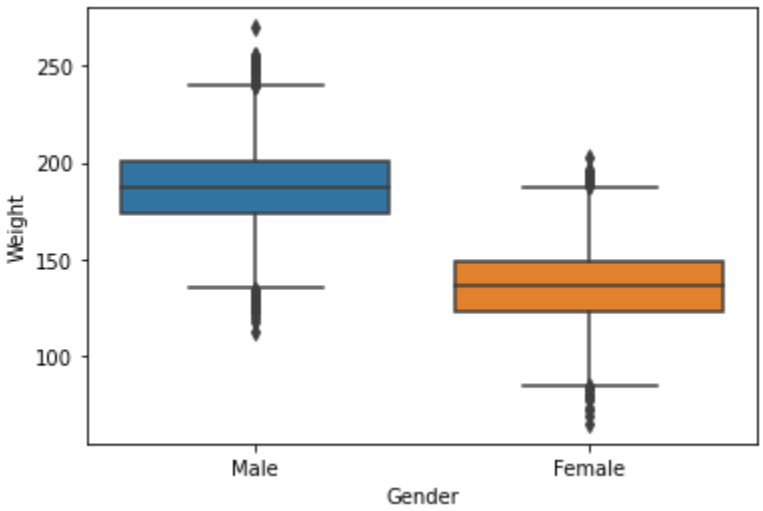
Out[7]:
```
<AxesSubplot:xlabel='Gender', ylabel='Height'>
```



In [8]:
```
sns.boxplot('Gender','Weight',data= df)
```

```
C:\Users\anirb\anaconda3\lib\site-packages\seaborn\_decorators.py:36: FutureWarning: Pass
the following variables as keyword args: x, y. From version 0.12, the only valid positiona
l argument will be `data`, and passing other arguments without an explicit keyword will re
sult in an error or misinterpretation.
  warnings.warn(
```

Out[8]:
```
<AxesSubplot:xlabel='Gender', ylabel='Weight'>
```



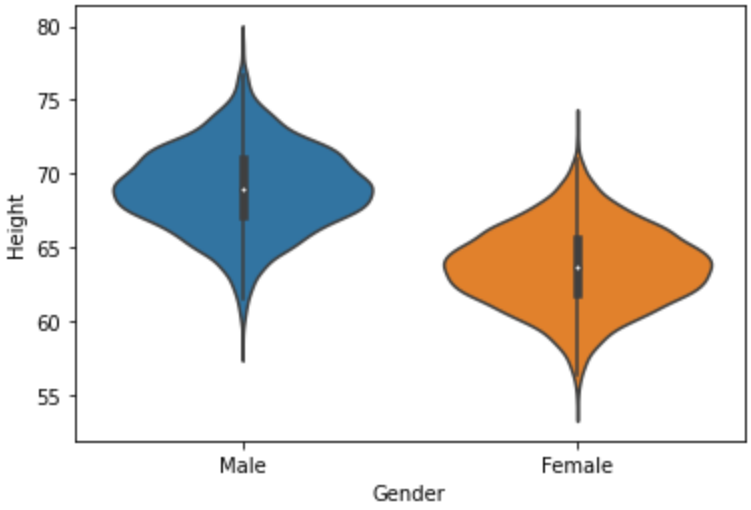
Violin Plot

Violin plot helps us to see both the distribution of data in terms of kernel.

```
sns.violinplot('Gender','Height',data= df)
```

```
C:\Users\anirb\anaconda3\lib\site-packages\seaborn\_decorators.py:36: FutureWarning: Pass
the following variables as keyword args: x, y. From version 0.12, the only valid positiona
l argument will be `data`, and passing other arguments without an explicit keyword will re
sult in an error or misinterpretation.
  warnings.warn(
```

Out[9]: <AxesSubplot:xlabel='Gender', ylabel='Height'>



In [10]:
```
sns.violinplot('Gender','Weight',data= df)
```

```
C:\Users\anirb\anaconda3\lib\site-packages\seaborn\_decorators.py:36: FutureWarning: Pass
the following variables as keyword args: x, y. From version 0.12, the only valid positiona
l argument will be `data`, and passing other arguments without an explicit keyword will re
sult in an error or misinterpretation.
  warnings.warn(
```

Out[10]: <AxesSubplot:xlabel='Gender', ylabel='Weight'>