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

In [2]:
```
df = pd.read_csv(r"C:\Users\Shreyas\OneDrive\Desktop\Dataset\Iris.csv")
```

In [3]:
```
print(df.info())
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 150 entries, 0 to 149
Data columns (total 6 columns):
 #   Column         Non-Null Count  Dtype  
---  ------         --------------  -----  
 0   Id             150 non-null    int64  
 1   SepalLengthCm  150 non-null    float64
 2   SepalWidthCm   150 non-null    float64
 3   PetalLengthCm  150 non-null    float64
 4   PetalWidthCm   150 non-null    float64
 5   Species        150 non-null    object 
dtypes: float64(4), int64(1), object(1)
memory usage: 7.2+ KB
None
```

In [4]:
```
print(df.describe())
```

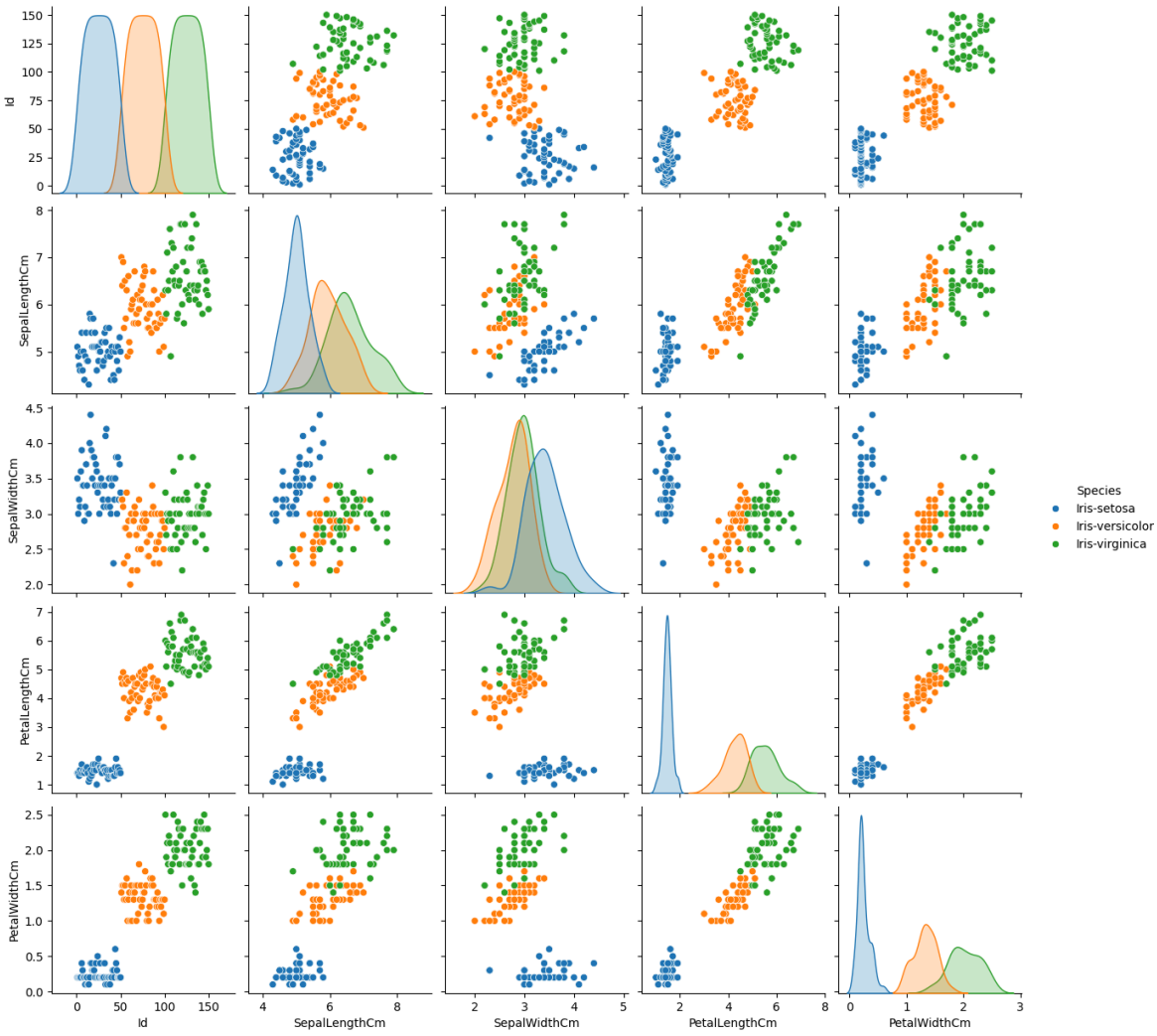
```
               Id  SepalLengthCm  SepalWidthCm  PetalLengthCm  PetalWidthCm
count  150.000000     150.000000    150.000000     150.000000    150.000000
mean    75.500000       5.843333      3.054000       3.758667      1.198667
std     43.445368       0.828066      0.433594       1.764420      0.763161
min      1.000000       4.300000      2.000000       1.000000      0.100000
25%     38.250000       5.100000      2.800000       1.600000      0.300000
50%     75.500000       5.800000      3.000000       4.350000      1.300000
75%    112.750000       6.400000      3.300000       5.100000      1.800000
max    150.000000       7.900000      4.400000       6.900000      2.500000
```

In [5]:
```
print(df.isnull().sum())
```

```
Id               0
SepalLengthCm    0
SepalWidthCm     0
PetalLengthCm    0
PetalWidthCm     0
Species          0
dtype: int64
```

In [6]:
```
sns.pairplot(df, hue='Species')
```

Out[6]:
```
<seaborn.axisgrid.PairGrid at 0x218e79ad490>
```

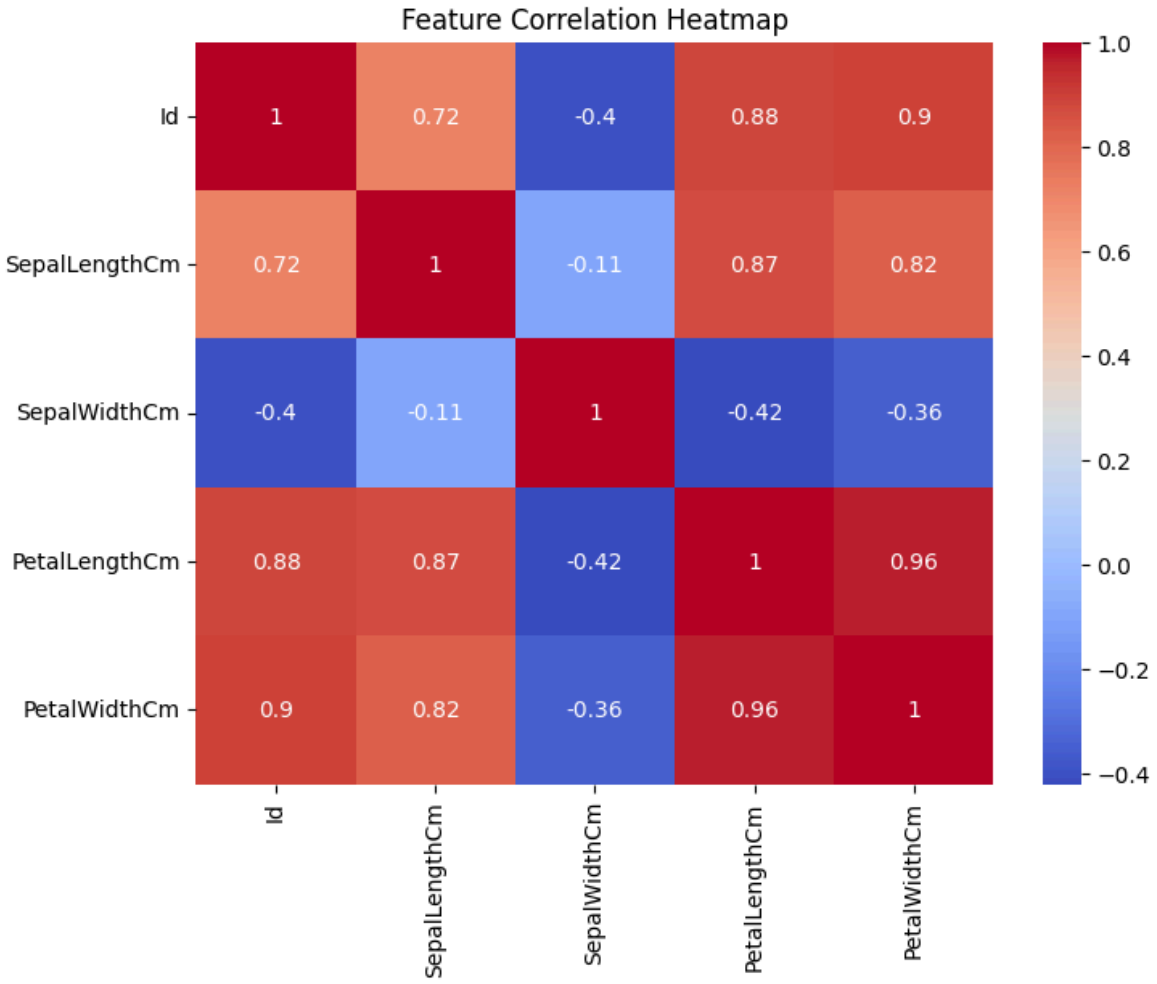


In [7]:
```
plt.savefig("pairplot.png")
```

```
<Figure size 640x480 with 0 Axes>
```

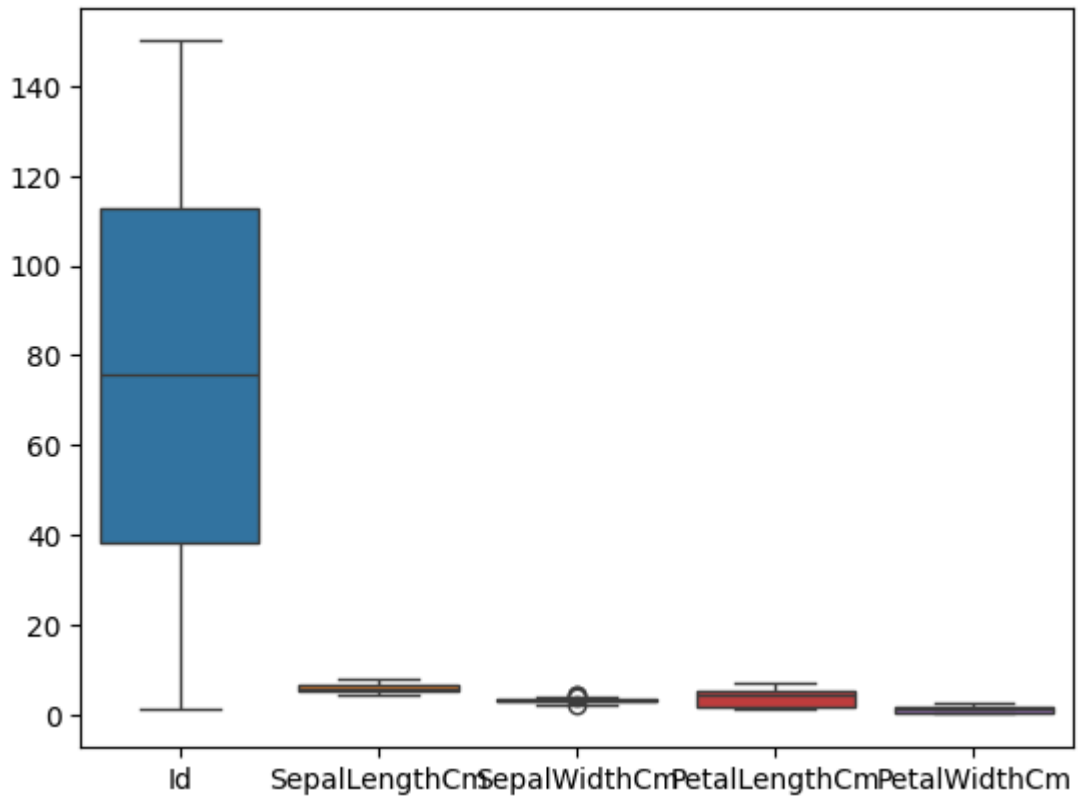
In [8]:
```
numeric_df = df.select_dtypes(include=['float64', 'int64'])
```

In [9]:
```
plt.figure(figsize=(8, 6))
sns.heatmap(numeric_df.corr(), annot=True, cmap="coolwarm")
plt.title("Feature Correlation Heatmap")
plt.savefig("correlation_heatmap.png")
plt.show()
```



In [17]:
```
sns.boxplot(data = df)
```

Out[17]: <Axes: >



In [ ]: