In [5]:

```
import pandas as pd
import seaborn as sns
import matplotlib.pyplot as plt

iris=pd.read_csv("Iris.csv")
print (iris.shape)
```

```
(150, 6)
```

In [15]:

```
print (iris.columns)
```

```
Index([u'Id', u'SepalLengthCm', u'SepalWidthCm', u'PetalLengthCm',
       u'PetalWidthCm', u'Species'],
      dtype='object')
```

In [16]:

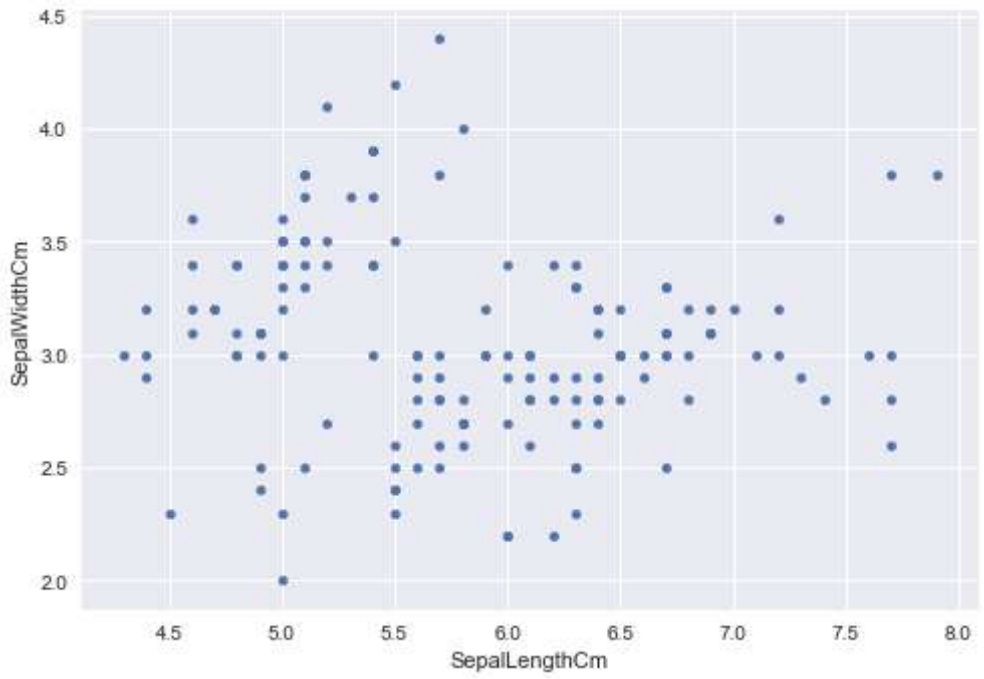
```
iris["Species"].value_counts()
```

Out[16]:

```
Iris-setosa        50
Iris-versicolor    50
Iris-virginica     50
Name: Species, dtype: int64
```

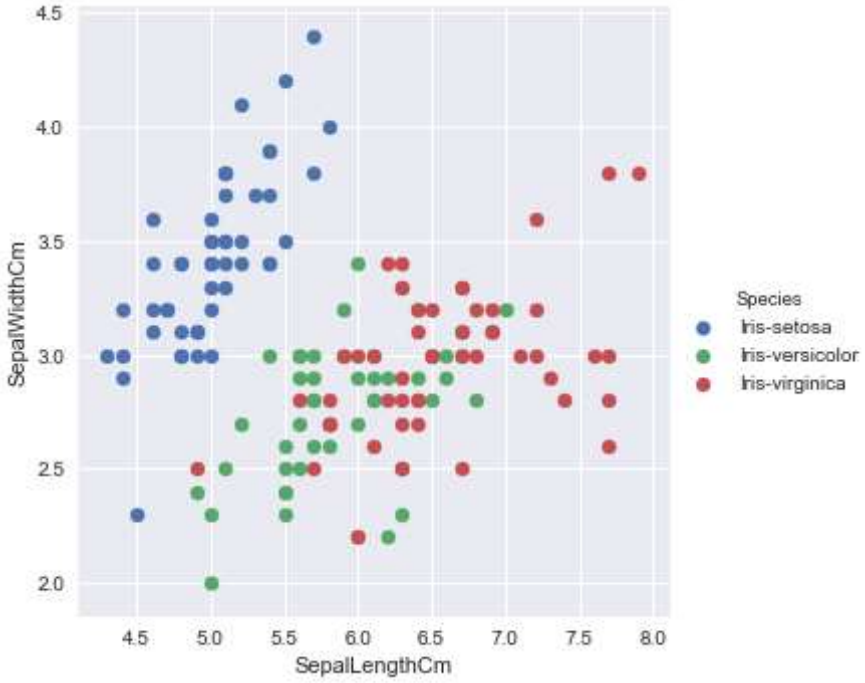
In [17]:

```
iris.plot(kind='scatter', x='SepalLengthCm', y='SepalWidthCm') ;
plt.show()
```



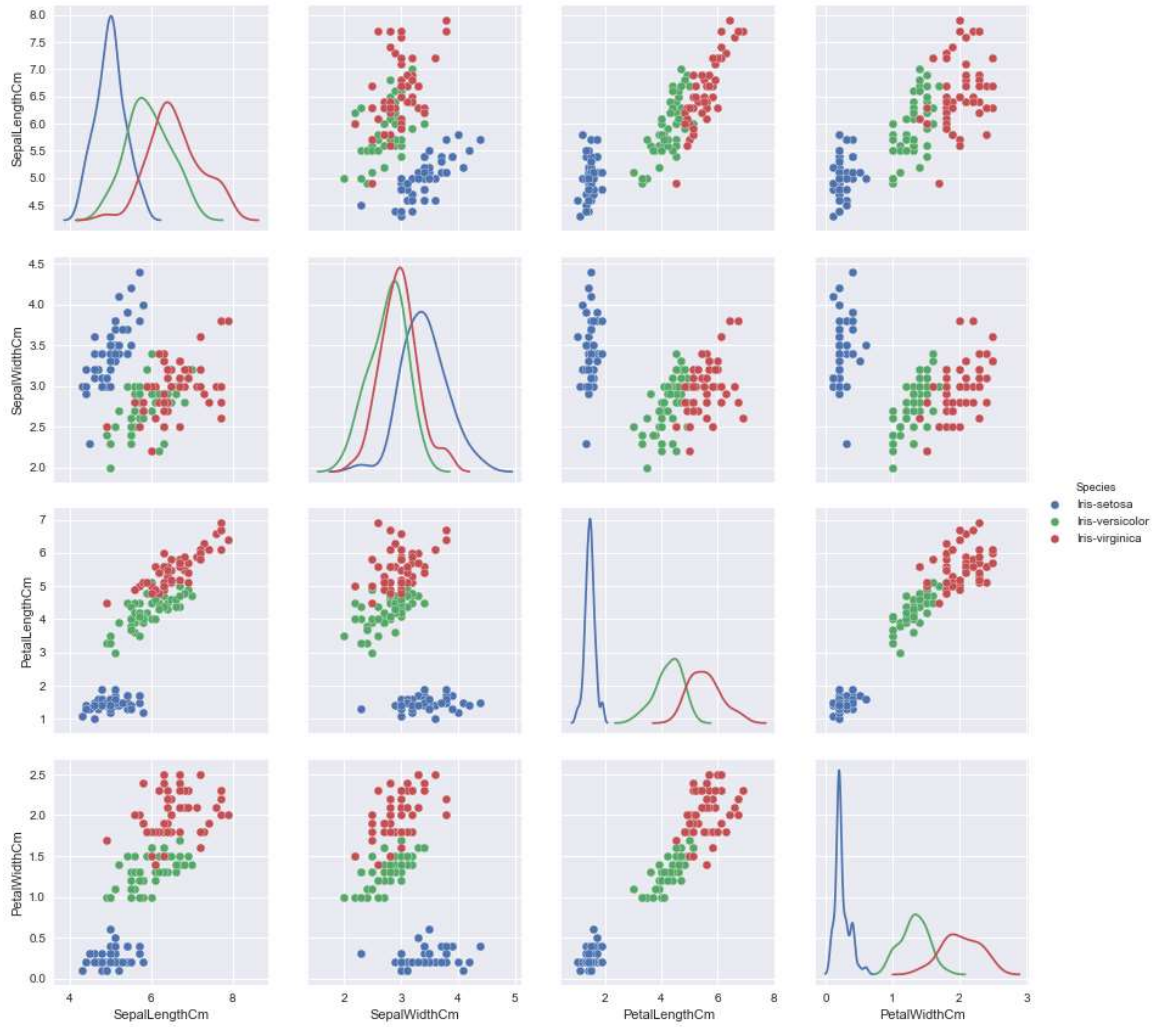
In [18]:

```
sns.FacetGrid(iris, hue="Species", size=5) \
   .map(plt.scatter, "SepalLengthCm", "SepalWidthCm") \
   .add_legend();
plt.show();
```



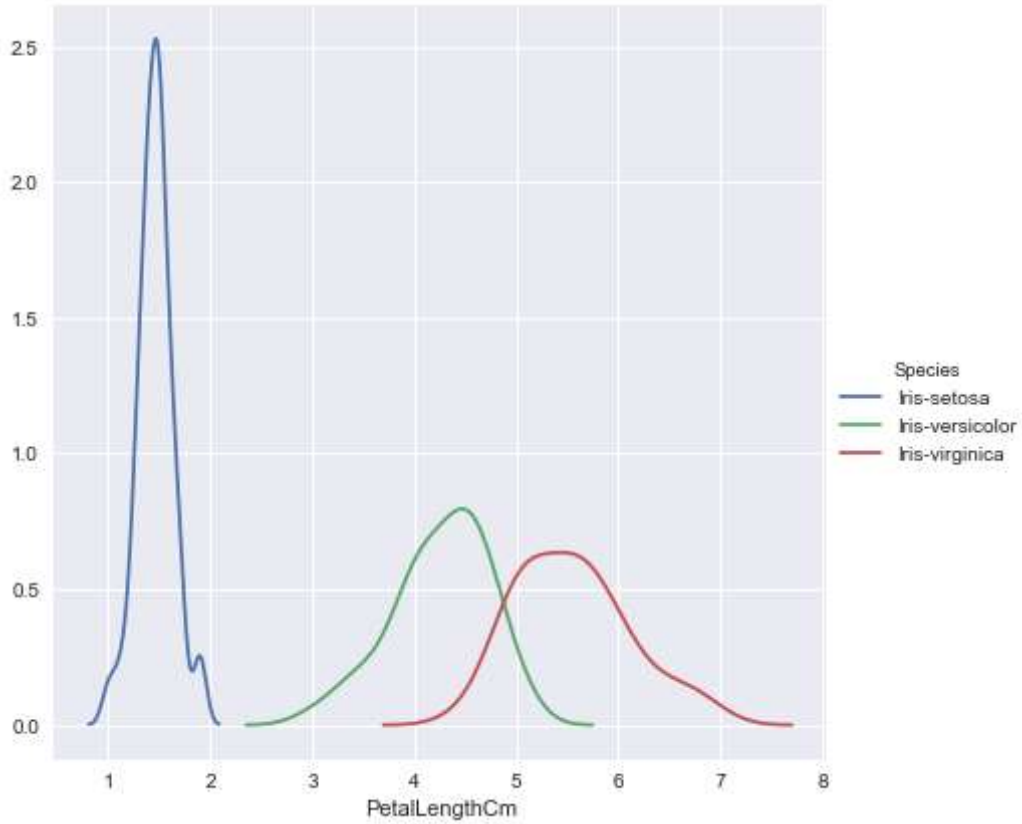
In [6]:

```
plt.close();
sns.pairplot(iris.drop('Id',axis=1),hue="Species",size=3,diag_kind="kde");
plt.show()
```


SepalLengthCm
SepalWidthCm
PetalLengthCm
PetalWidthCm
Species
Iris-setosa
Iris-versicolor
Iris-virginica

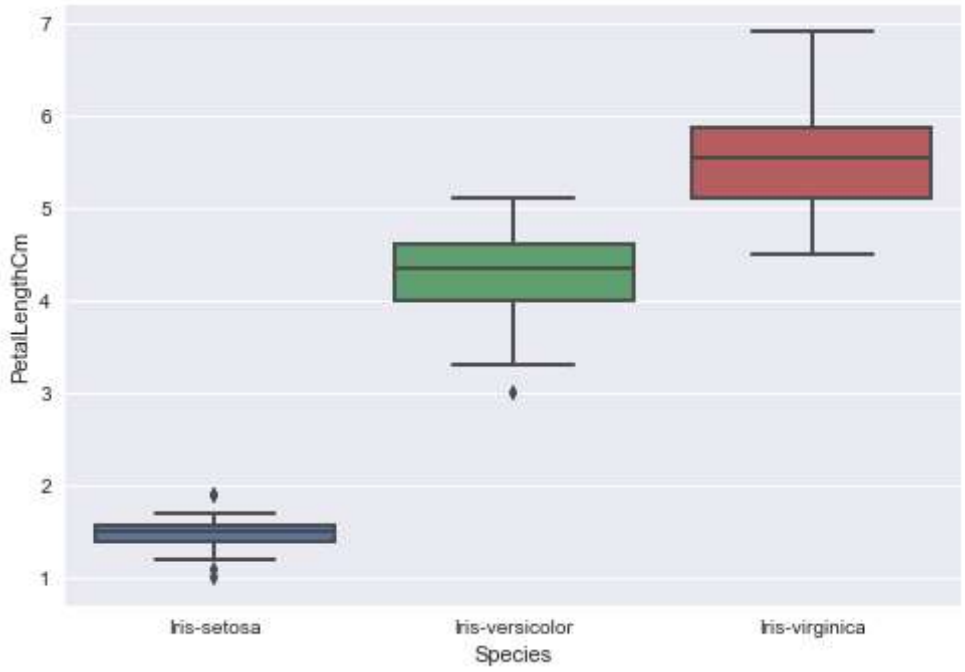
In [16]:

```
sns.FacetGrid(iris.drop("Id", axis=1), hue="Species", size=6) \
   .map(sns.kdeplot, "PetalLengthCm") \
   .add_legend();
plt.show();
```



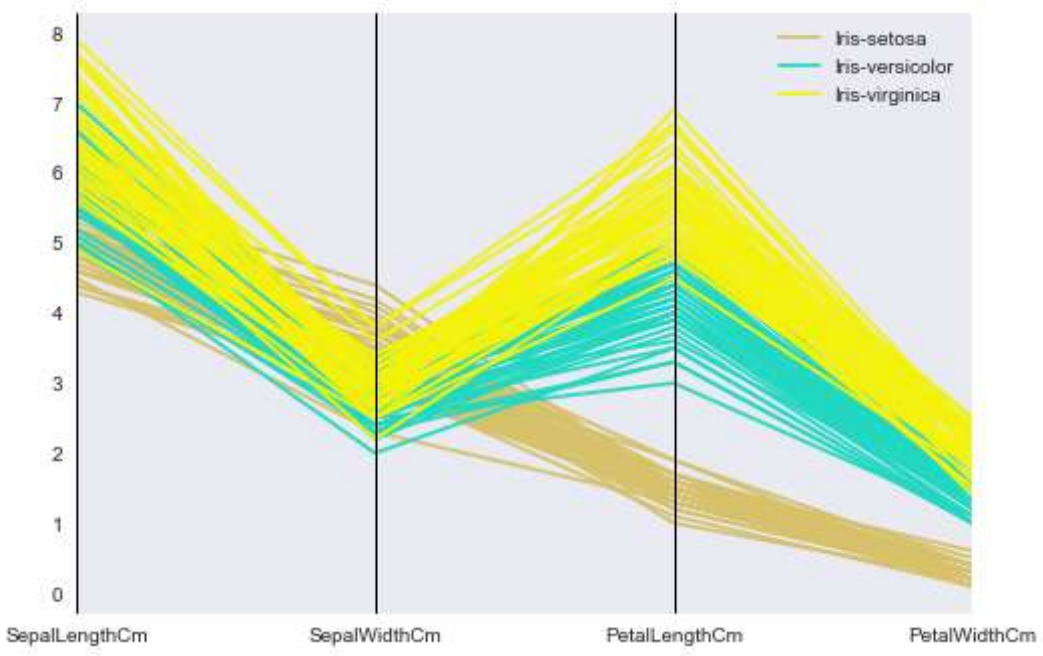
In [19]:

```
sns.boxplot(x="Species",y="PetalLengthCm", data=iris)
plt.show()
```



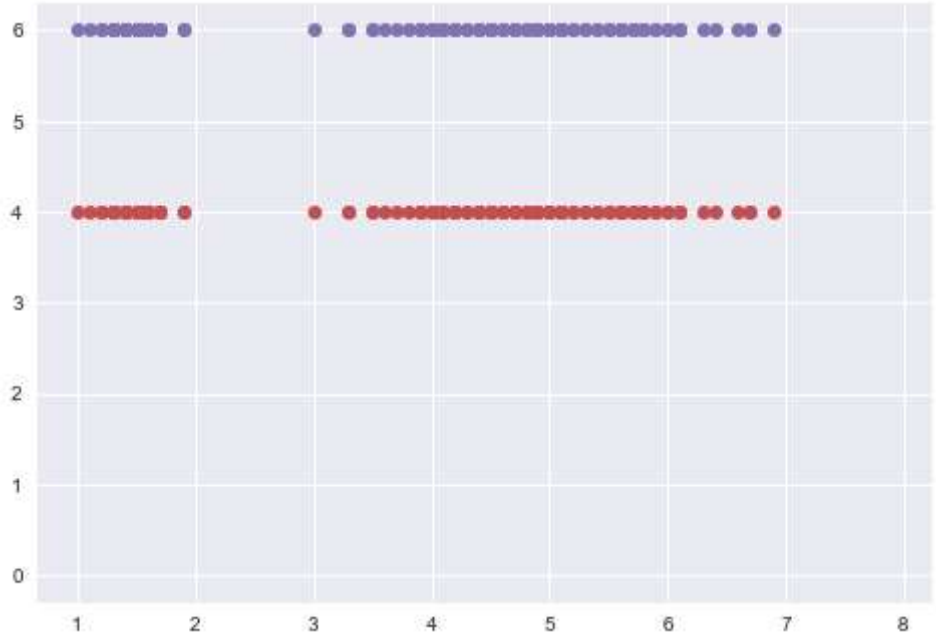
In [20]:

```
from pandas.plotting import parallel_coordinates
parallel_coordinates(iris.drop("Id", axis=1), "Species");
plt.show();
```



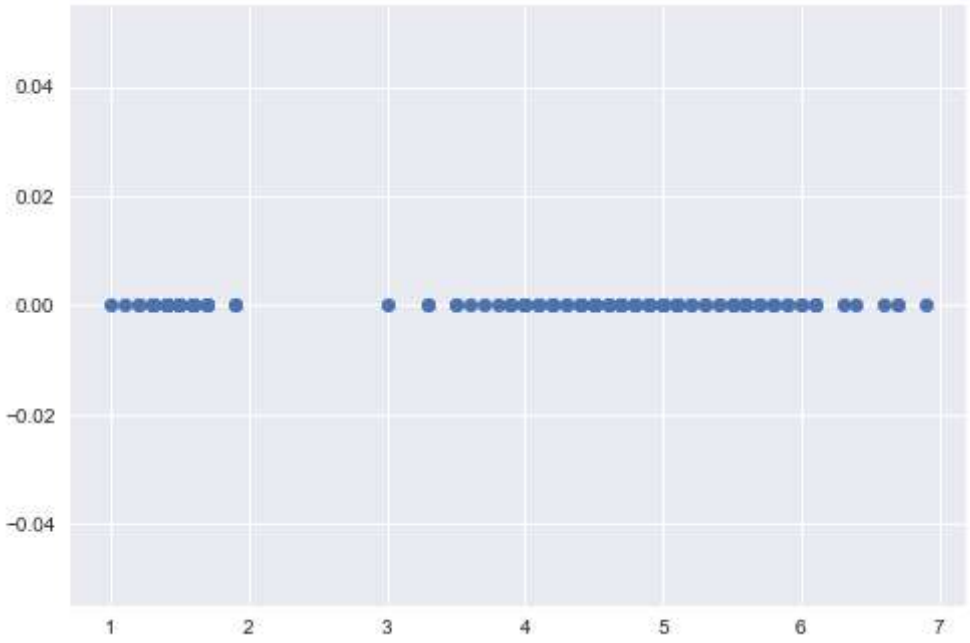
In [21]:

```
#1-D scatter plo of SepalLength
import numpy as np
plt.plot(iris['SepalLengthCm'], np.zeros_like(iris['SepalLengthCm']), 'x')
plt.plot(iris['SepalLengthCm'], np.zeros_like(iris['SepalWidthCm'])+2, 'x')
plt.plot(iris['PetalLengthCm'], np.zeros_like(iris['PetalLengthCm'])+4, 'o')
plt.plot(iris['PetalLengthCm'], np.zeros_like(iris['PetalWidthCm'])+6, 'o')
plt.show()
```



In [22]:

```
#1-D scatter plo of petal-lenght
import numpy as np
plt.plot(iris['PetalLengthCm'], np.zeros_like(iris['PetalLengthCm']), 'o')
plt.show()
```



In [23]:

```
ax = sns.kdeplot(iris['SepalLengthCm'], cumulative=True)
ax = sns.kdeplot(iris['SepalWidthCm'], cumulative=True)
ax = sns.kdeplot(iris['PetalLengthCm'], cumulative=True)
ax = sns.kdeplot(iris['PetalWidthCm'], cumulative=True)
plt.show()
```