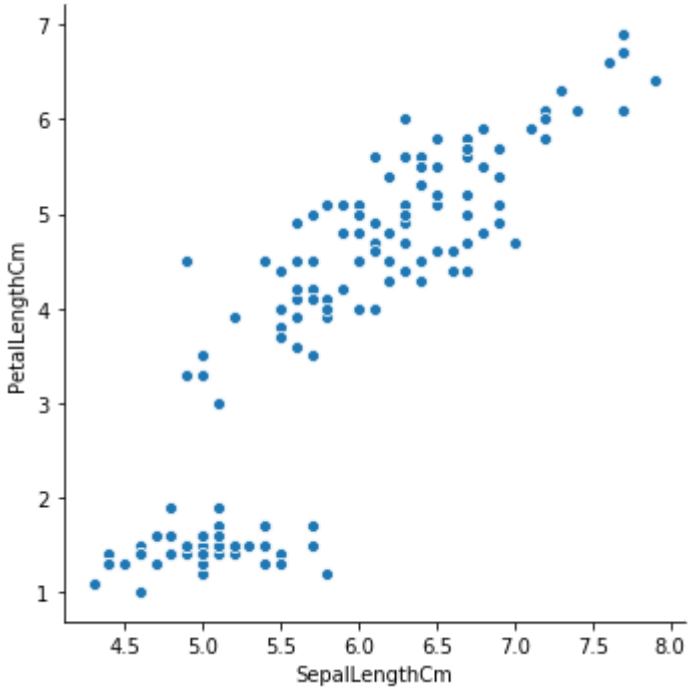
In [1]:

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

In [12]:

```
a=pd.read_csv(r"C:\Users\Ritik Kumar Tiwari\Desktop\datasets_19_420_Iris.csv")
sns.relplot(x="SepalLengthCm", y="PetalLengthCm", data=a)
plt.show()
```



In [15]:

```
a=pd.read_csv(r"C:\Users\Ritik Kumar Tiwari\Desktop\datasets_19_420_Iris.csv")
plt.show()
```

In [16]:

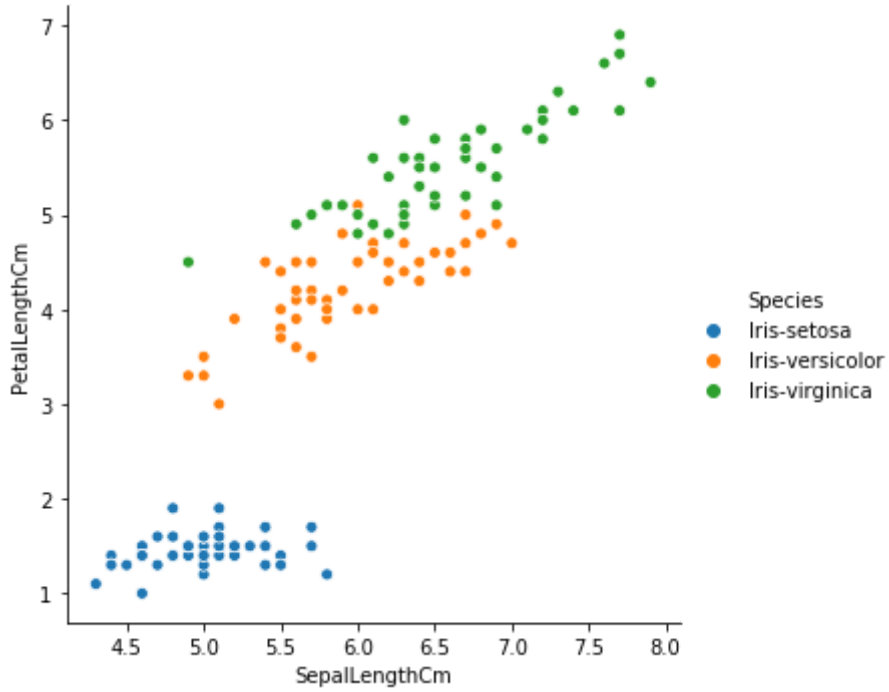
```
a.head()
```

Out[16]:

	Id	SepalLengthCm	SepalWidthCm	PetalLengthCm	PetalWidthCm	Species
0	1	5.1	3.5	1.4	0.2	Iris-setosa
1	2	4.9	3.0	1.4	0.2	Iris-setosa
2	3	4.7	3.2	1.3	0.2	Iris-setosa
3	4	4.6	3.1	1.5	0.2	Iris-setosa
4	5	5.0	3.6	1.4	0.2	Iris-setosa

In [18]:

```
sns.relplot(x="SepalLengthCm", y="PetalLengthCm",hue="Species", data=a)
plt.show()
```

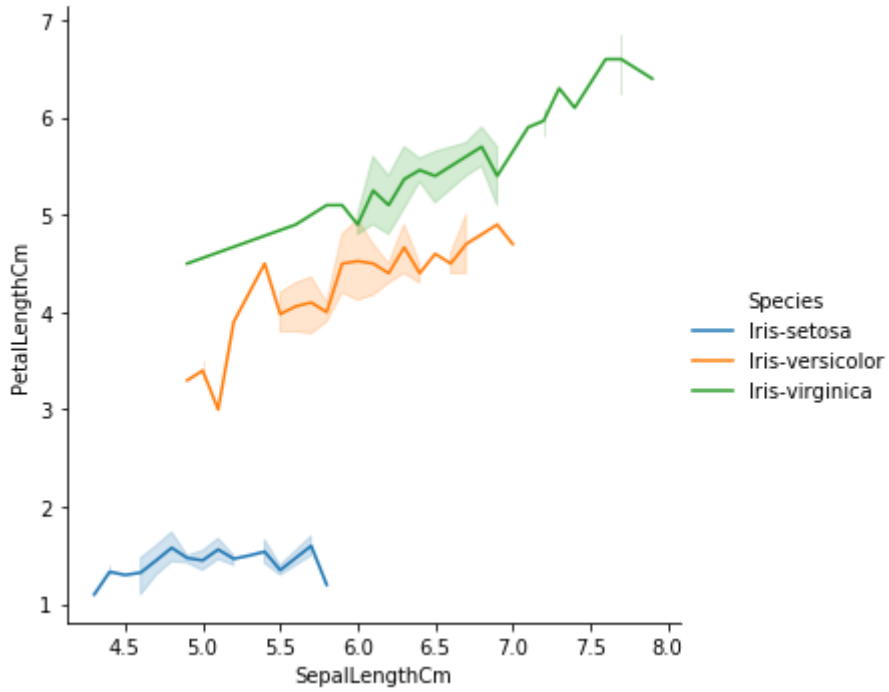


In [20]:

```
sns.relplot(x="SepalLengthCm", y="PetalLengthCm",hue="Species", kind="line", data=a)
```

Out[20]:

```
<seaborn.axisgrid.FacetGrid at 0x2b72d9efd08>
```

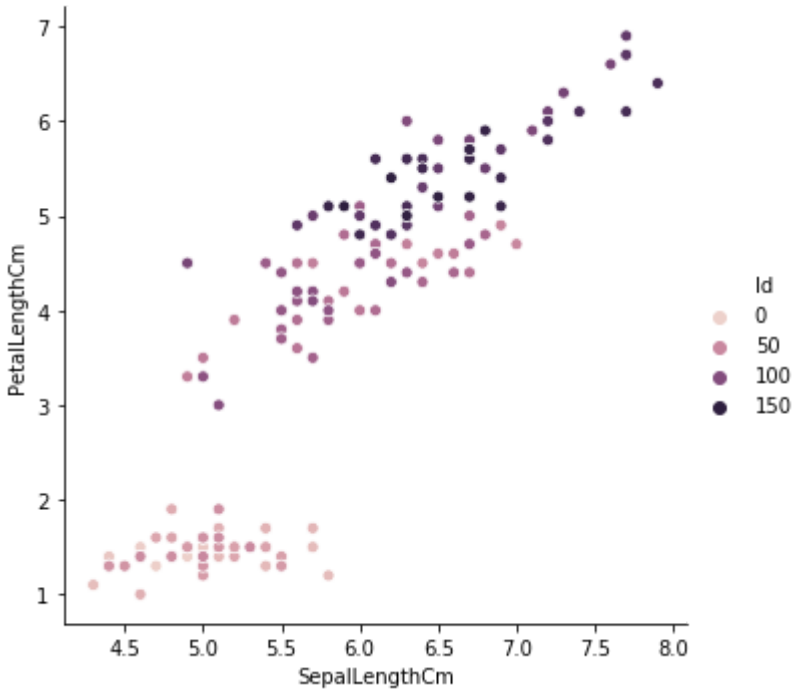


In [29]:

```
sns.relplot(x="SepalLengthCm", y="PetalLengthCm",hue="Id",  data=a)
```

Out[29]:

```
<seaborn.axisgrid.FacetGrid at 0x2b72d99d5c8>
```



In [30]:

```
a.columns
```

Out[30]:

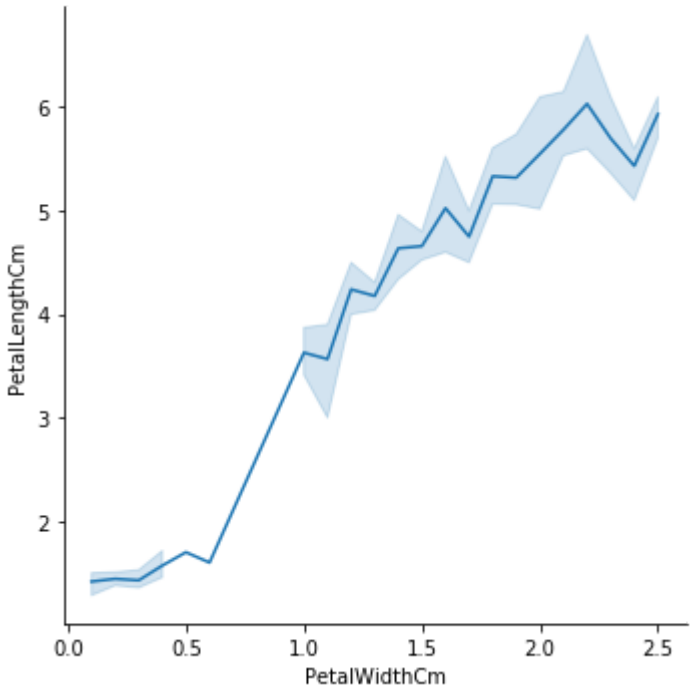
```
Index(['Id', 'SepalLengthCm', 'SepalWidthCm', 'PetalLengthCm', 'PetalWidth
Cm',
       'Species'],
      dtype='object')
```

In [32]:

```
sns.relplot(x="PetalWidthCm", y="PetalLengthCm", kind="line",  data=a)
```

Out[32]:

```
<seaborn.axisgrid.FacetGrid at 0x2b72e11f8c8>
```

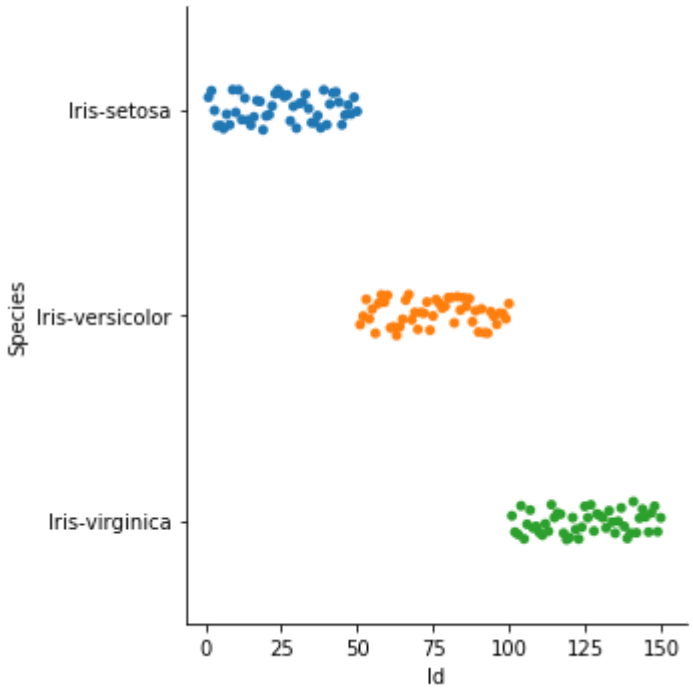


In [33]:

```
sns.catplot(x="Id", y="Species", data=a)
```

Out[33]:

```
<seaborn.axisgrid.FacetGrid at 0x2b72e1a4c88>
```

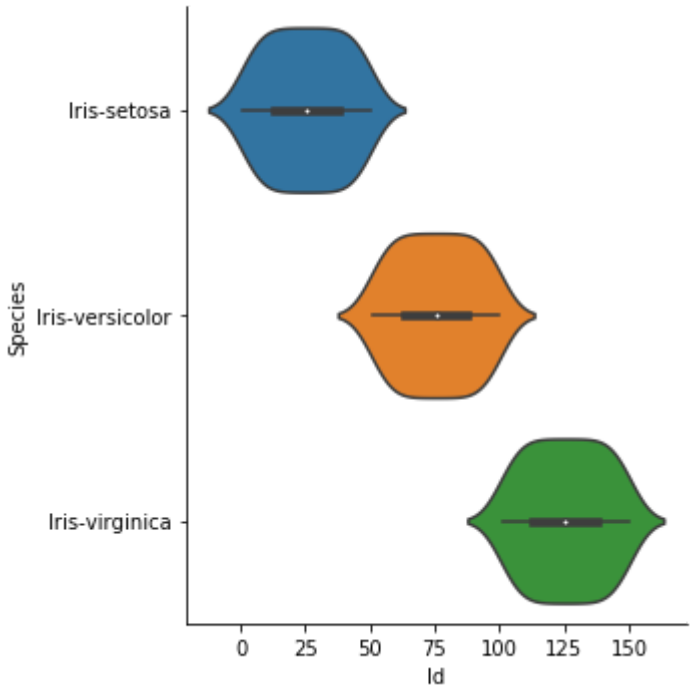


In [41]:

```
sns.catplot(x="Id", y="Species", kind="violin", data=a)
```

Out[41]:

```
<seaborn.axisgrid.FacetGrid at 0x2b72fc0ff08>
```

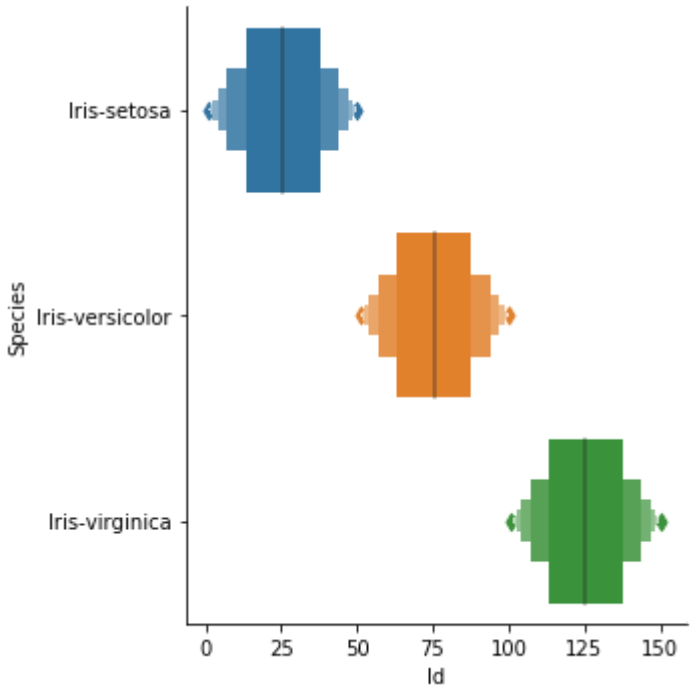


In [43]:

```
sns.catplot(x="Id", y="Species", kind="boxen", data=a)
```

Out[43]:

```
<seaborn.axisgrid.FacetGrid at 0x2b72fcc11c8>
```



In [46]:

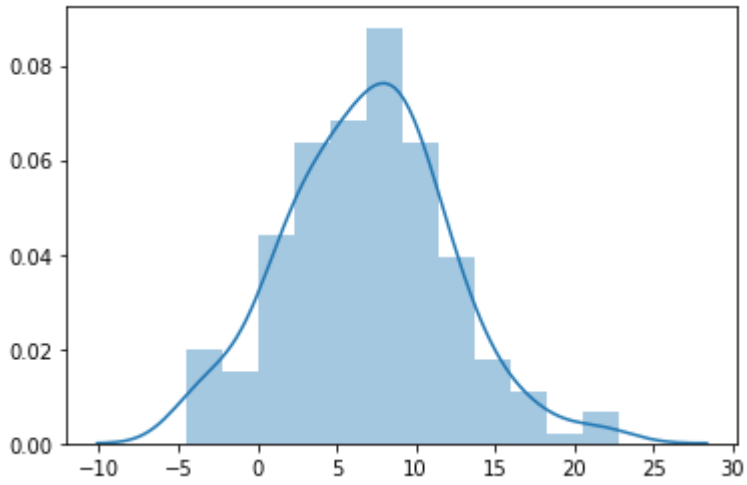
```
from scipy import stats
```

In [52]:

```
c=np.random.normal(loc=7, size=200, scale=5)
sns.distplot(c)
```

Out[52]:

```
<matplotlib.axes._subplots.AxesSubplot at 0x2b72fe44b08>
```



In [85]:

```
a.head()
```

Out[85]:

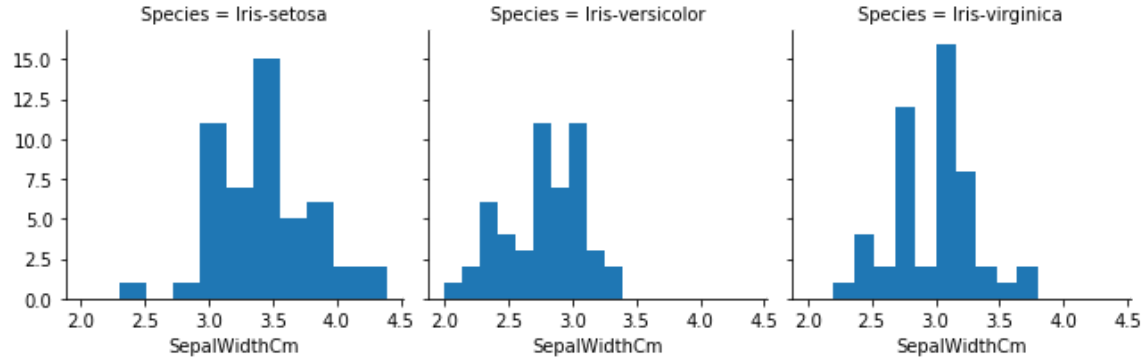
	Id	SepalLengthCm	SepalWidthCm	PetalLengthCm	PetalWidthCm	Species
0	1	5.1	3.5	1.4	0.2	Iris-setosa
1	2	4.9	3.0	1.4	0.2	Iris-setosa
2	3	4.7	3.2	1.3	0.2	Iris-setosa
3	4	4.6	3.1	1.5	0.2	Iris-setosa
4	5	5.0	3.6	1.4	0.2	Iris-setosa

In [87]:

```
b=sns.FacetGrid(a, col="Species")
b.map(plt.hist, "SepalWidthCm")
```

Out[87]:

```
<seaborn.axisgrid.FacetGrid at 0x2b73138f688>
```

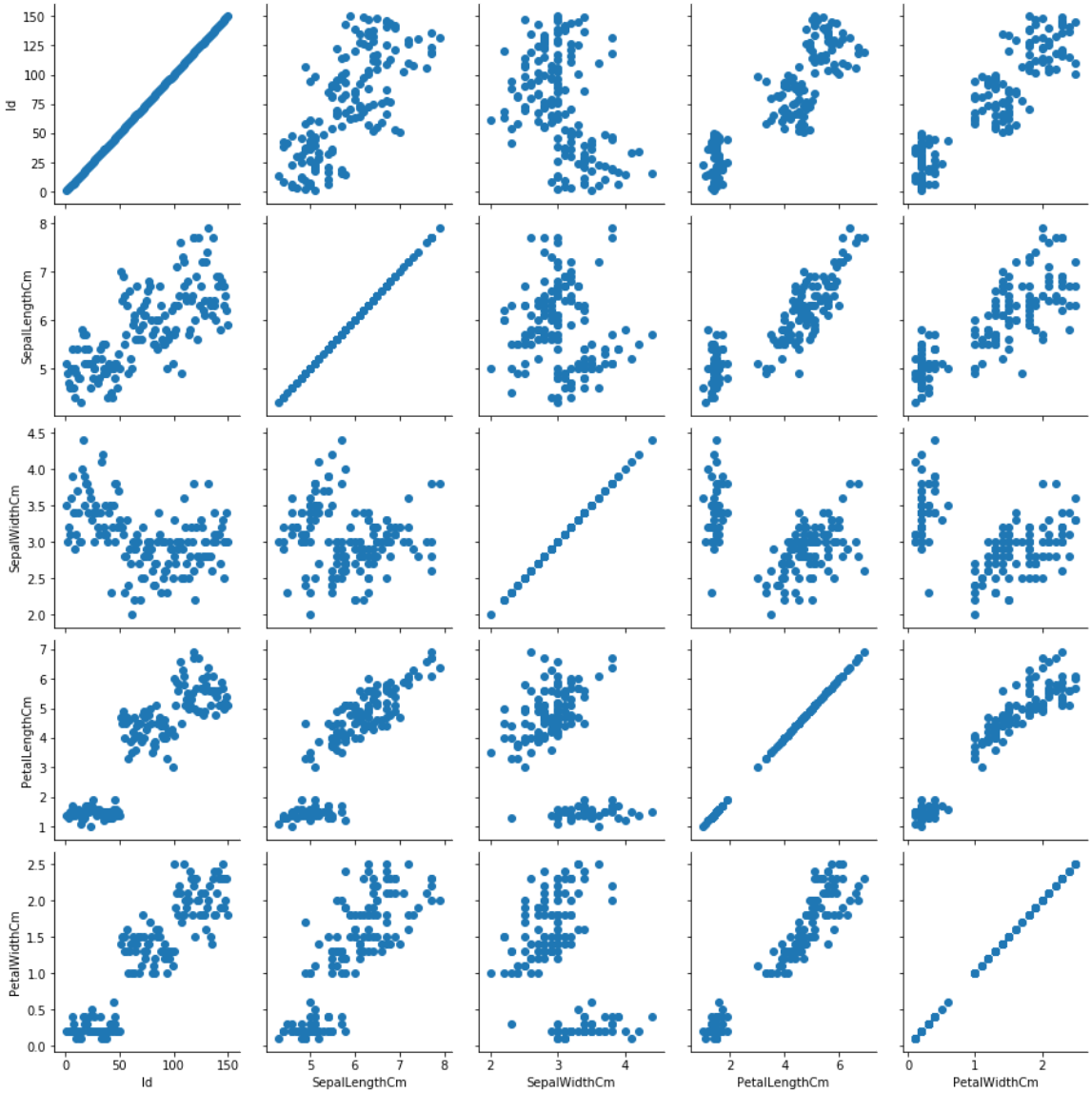


In [104]:

```
b=sns.PairGrid(a)
b.map(plt.scatter)
```

Out[104]:

```
<seaborn.axisgrid.PairGrid at 0x2b731d51cc8>
```

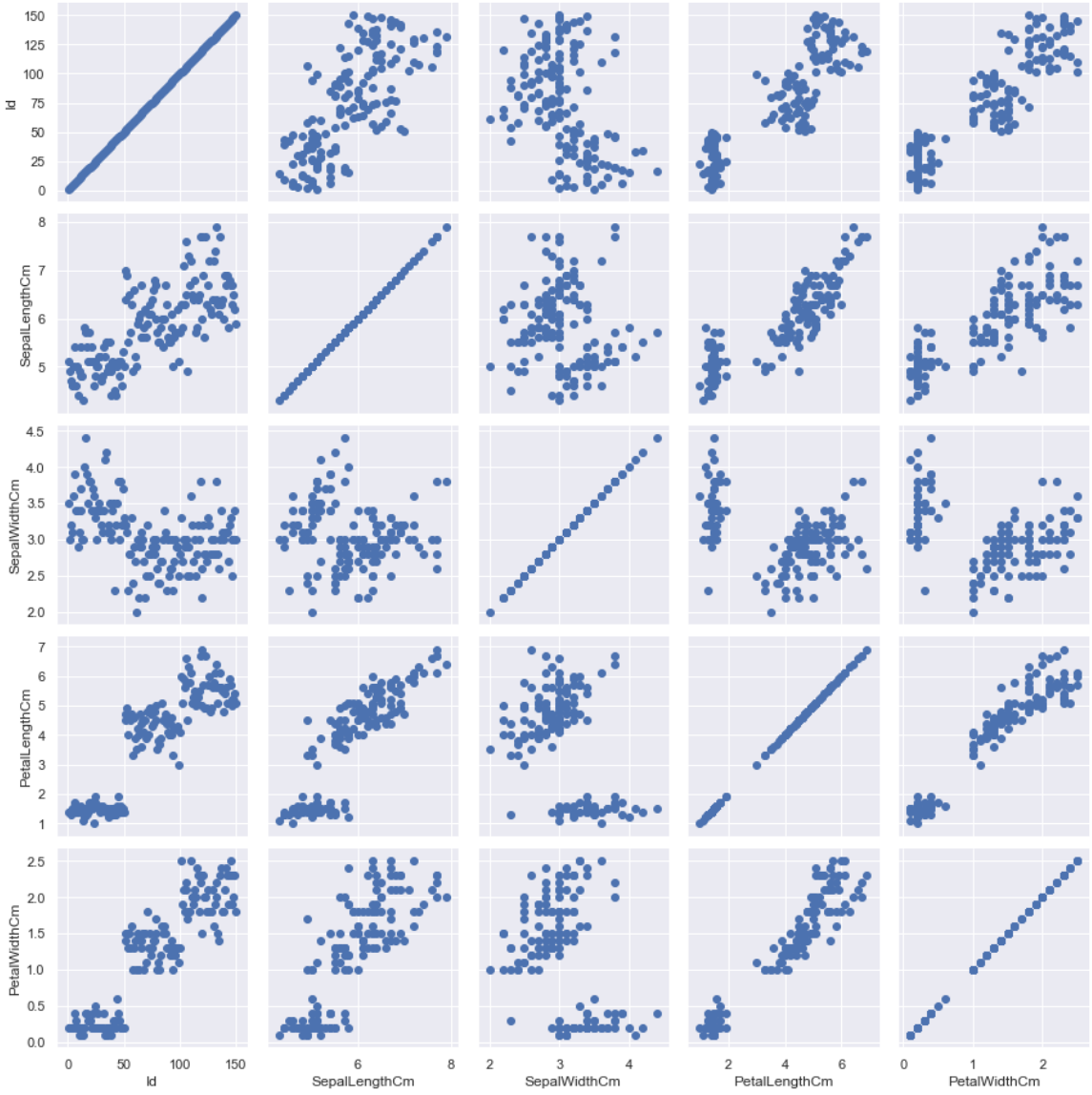

Id
SepalLengthCm
SepalWidthCm
PetalLengthCm
PetalWidthCm
Id
SepalLengthCm
SepalWidthCm
PetalLengthCm
PetalWidthCm

In [107]:

```
sns.set(style="darkgrid")
c=sns.PairGrid(a)
c.map(plt.scatter)
```

Out[107]:

```
<seaborn.axisgrid.PairGrid at 0x2b7330ce6c8>
```

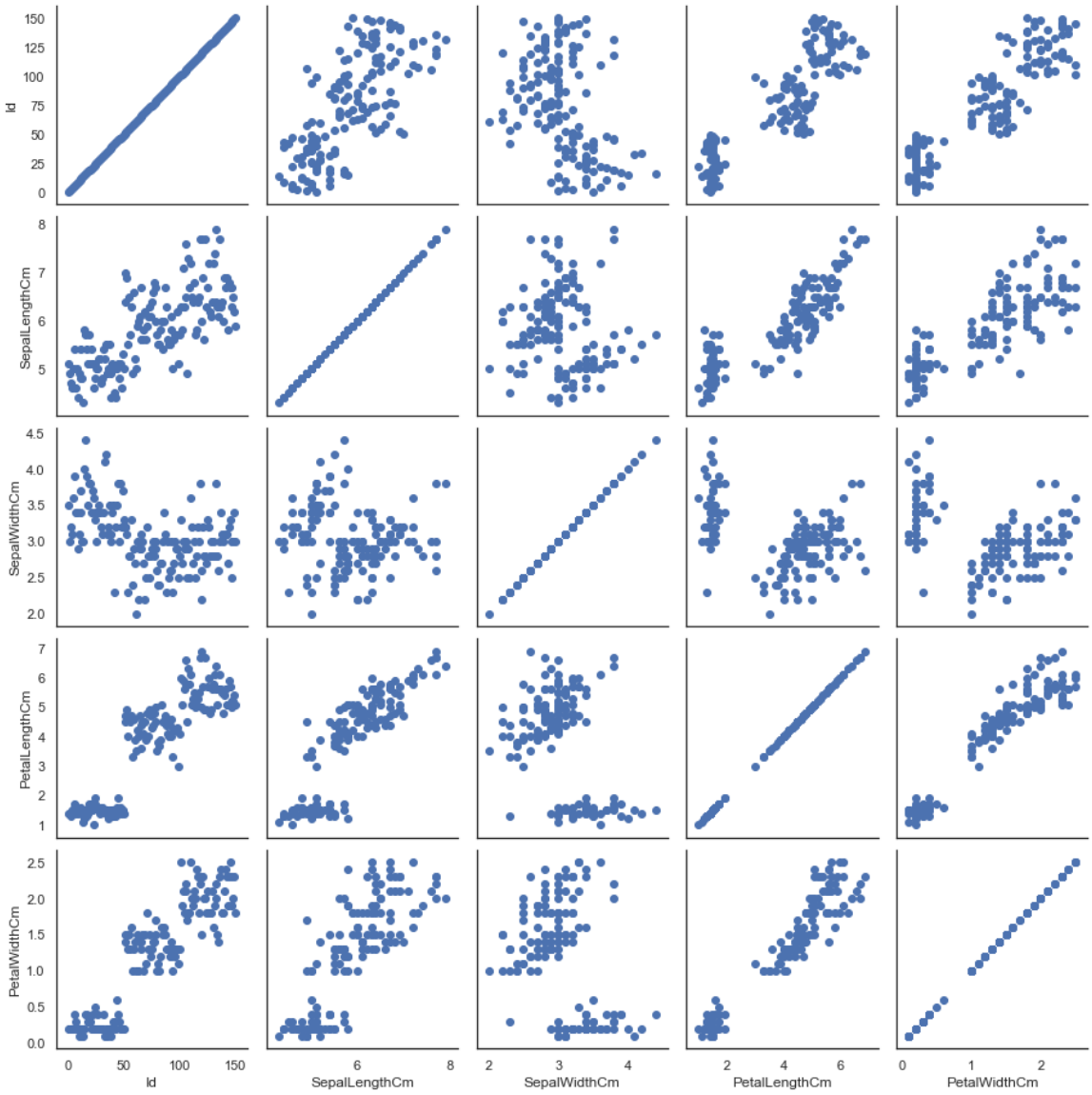


In [108]:

```
sns.set(style="white")
c=sns.PairGrid(a)
c.map(plt.scatter)
```

Out[108]:

```
<seaborn.axisgrid.PairGrid at 0x2b73278b388>
```

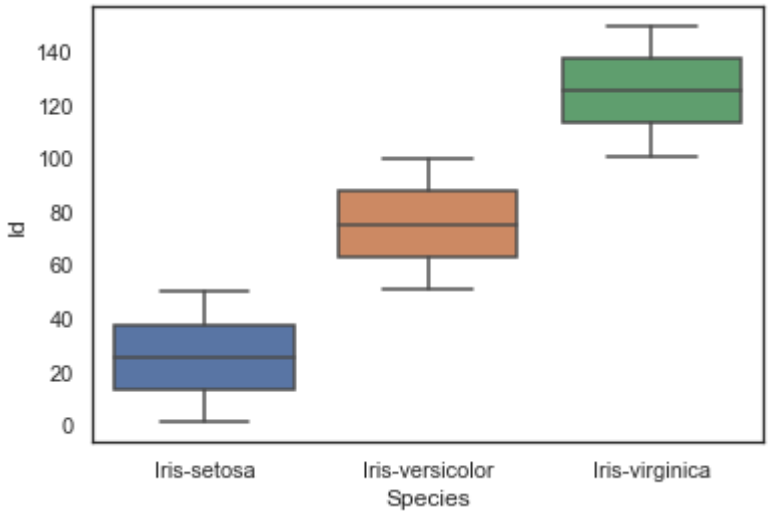


In [110]:

```
sns.set(style="white", color_codes=True)
sns.boxplot(x="Species", y="Id", data=a)
```

Out[110]:

```
<matplotlib.axes._subplots.AxesSubplot at 0x2b733114d88>
```

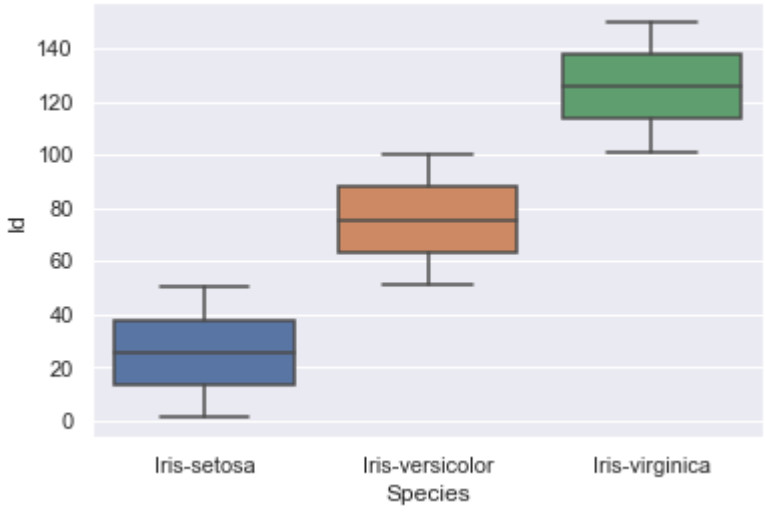


In [111]:

```
sns.set(style="darkgrid", color_codes=True)
sns.boxplot(x="Species", y="Id", data=a)
```

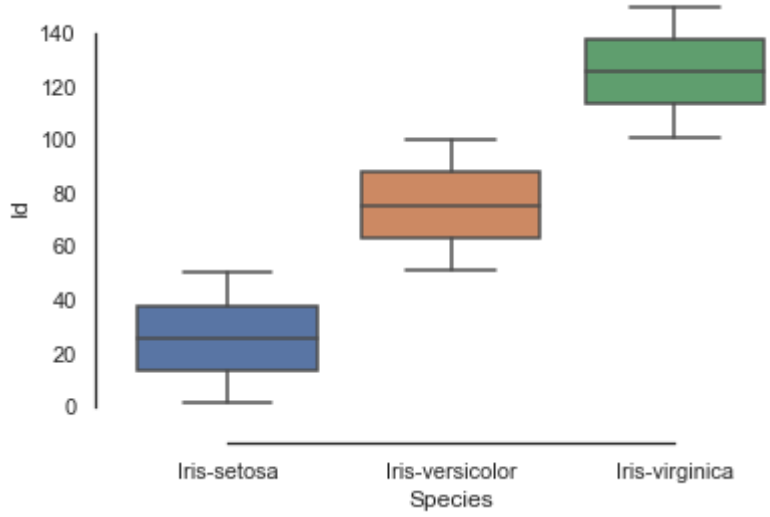
Out[111]:

```
<matplotlib.axes._subplots.AxesSubplot at 0x2b733b2ad08>
```



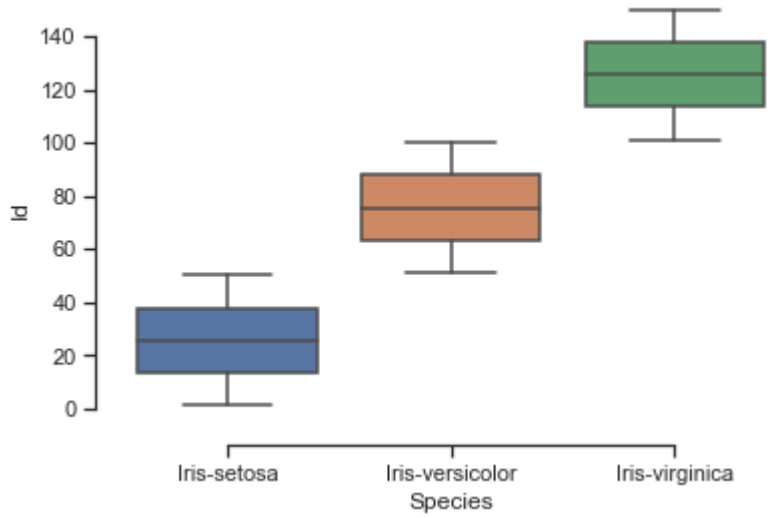
In [112]:

```
sns.set(style="white", color_codes=True)
sns.boxplot(x="Species", y="Id", data=a)
sns.despine(offset=10, trim=True)
```



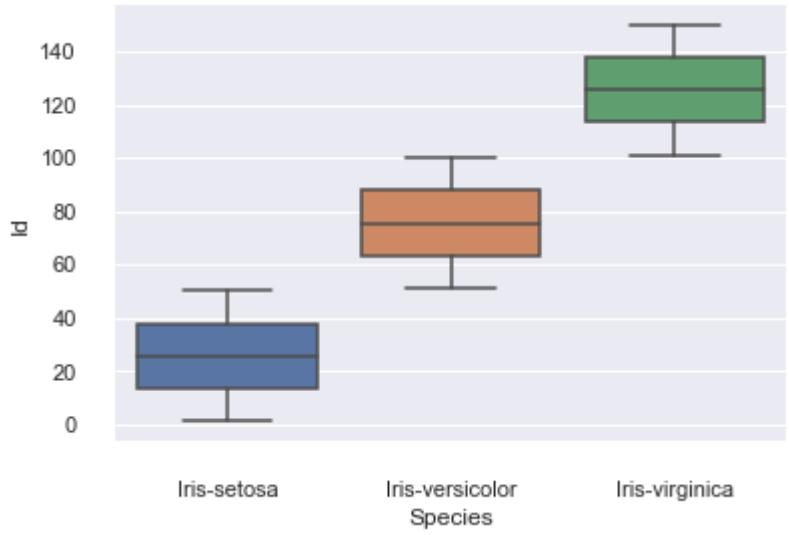
In [113]:

```
sns.set(style="ticks", color_codes=True)
sns.boxplot(x="Species", y="Id", data=a)
sns.despine(offset=10, trim=True)
```



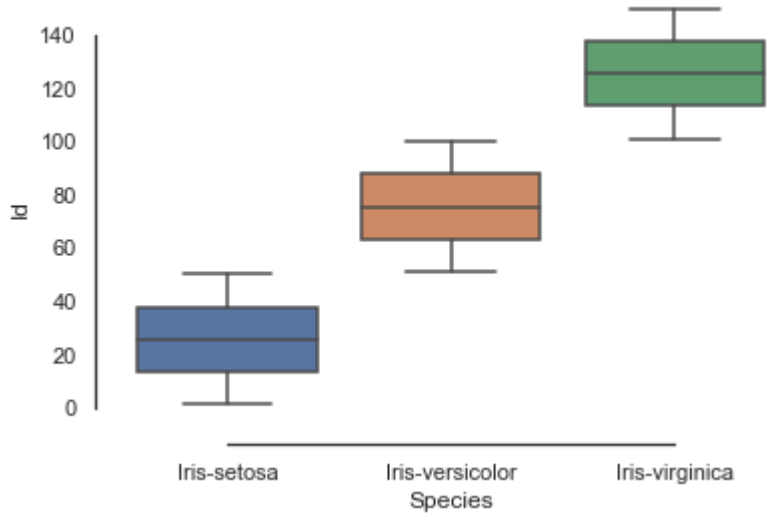
In [114]:

```
sns.set(style="darkgrid", color_codes=True)
sns.boxplot(x="Species", y="Id", data=a)
sns.despine(offset=10, trim=True)
```



In [120]:

```
sns.set(style="white", color_codes=True)
sns.boxplot(x="Species", y="Id", data=a)
sns.despine(offset=10, trim=True)
c=sns.color_palette()
sns.palplot(c)
```



In [121]:

```
c=sns.color_palette()
sns.palplot(c)
```

In [ ]:

```

```