

In [3]:

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

In [4]:

```
df=pd.read_csv('/home/ubuntu/Downloads/IRIS.csv')
df
```

Out[4]:

	sepal_length	sepal_width	petal_length	petal_width	species
0	5.1	3.5	1.4	0.2	Iris-setosa
1	4.9	3.0	1.4	0.2	Iris-setosa
2	4.7	3.2	1.3	0.2	Iris-setosa
3	4.6	3.1	1.5	0.2	Iris-setosa
4	5.0	3.6	1.4	0.2	Iris-setosa
...
145	6.7	3.0	5.2	2.3	Iris-virginica
146	6.3	2.5	5.0	1.9	Iris-virginica
147	6.5	3.0	5.2	2.0	Iris-virginica
148	6.2	3.4	5.4	2.3	Iris-virginica
149	5.9	3.0	5.1	1.8	Iris-virginica

150 rows × 5 columns

In [5]:

```
df.isnull().sum()
```

Out[5]:

```
sepal_length    0
sepal_width     0
petal_length    0
petal_width     0
species         0
dtype: int64
```

In [6]:

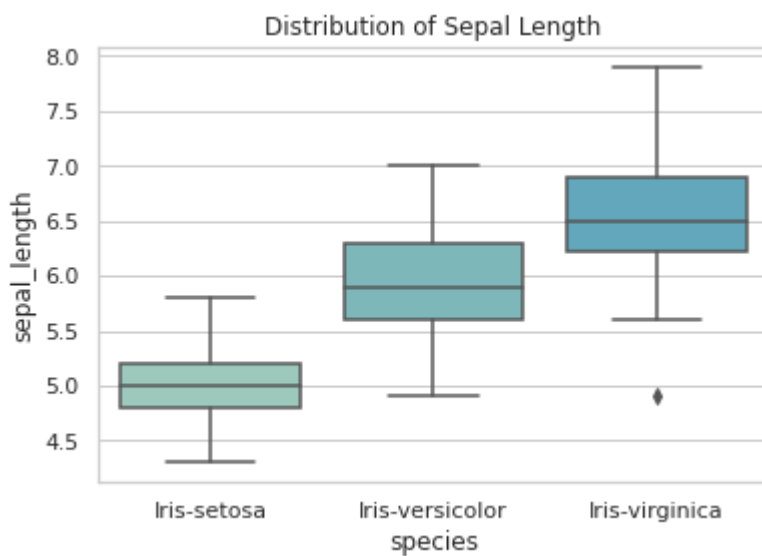
```
df.describe()
```

Out[6]:

	sepal_length	sepal_width	petal_length	petal_width
count	150.000000	150.000000	150.000000	150.000000
mean	5.843333	3.054000	3.758667	1.198667
std	0.828066	0.433594	1.764420	0.763161
min	4.300000	2.000000	1.000000	0.100000
25%	5.100000	2.800000	1.600000	0.300000
50%	5.800000	3.000000	4.350000	1.300000
75%	6.400000	3.300000	5.100000	1.800000
max	7.900000	4.400000	6.900000	2.500000

In [7]:

```
sns.set(style='whitegrid',palette='GnBu_d',rc={'figure.figsize':(11.7,8.27)})  
sns.boxplot(x='species',y='sepal_length',data=df)  
plt.title('Distribution of Sepal Length')  
plt.show()
```

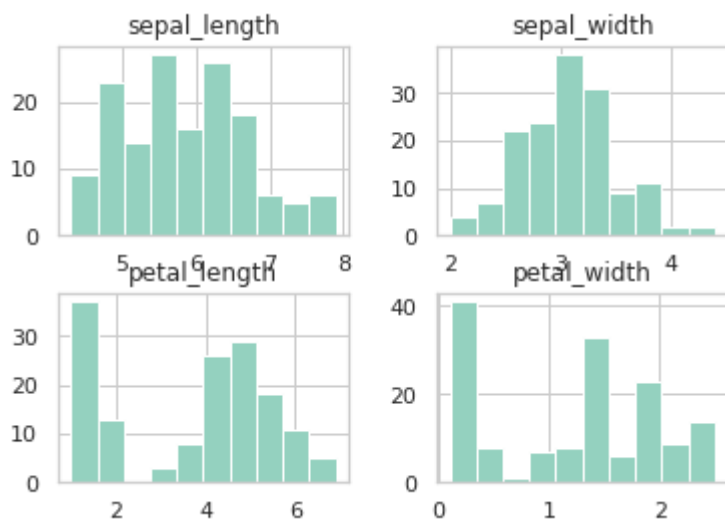


In [8]:

```
df.hist()
```

Out[8]:

```
array([[<Axes: title={'center': 'sepal_length'}>,  
       <Axes: title={'center': 'sepal_width'}>],  
       [<Axes: title={'center': 'petal_length'}>,  
       <Axes: title={'center': 'petal_width'}>]], dtype=object)
```



In []: