

Q1 part 1

In [1]:

```
import pandas as pd
import matplotlib
from matplotlib import pyplot as plt
```

In [2]:

```
data = pd.read_csv("F:/assignments/Sem 6 Assignments/ML Assignment 1/Q1_1/Iris.csv")
```

In [3]:

```
data.columns
```

Out[3]:

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

In [4]:

```
data
```

Out[4]:

	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
...
145	146	6.7	3.0	5.2	2.3	Iris-virginica
146	147	6.3	2.5	5.0	1.9	Iris-virginica
147	148	6.5	3.0	5.2	2.0	Iris-virginica
148	149	6.2	3.4	5.4	2.3	Iris-virginica
149	150	5.9	3.0	5.1	1.8	Iris-virginica

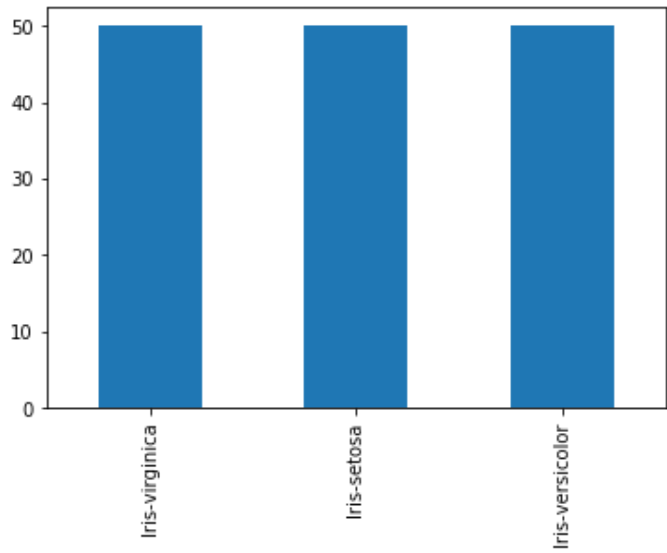
150 rows x 6 columns

In [5]:

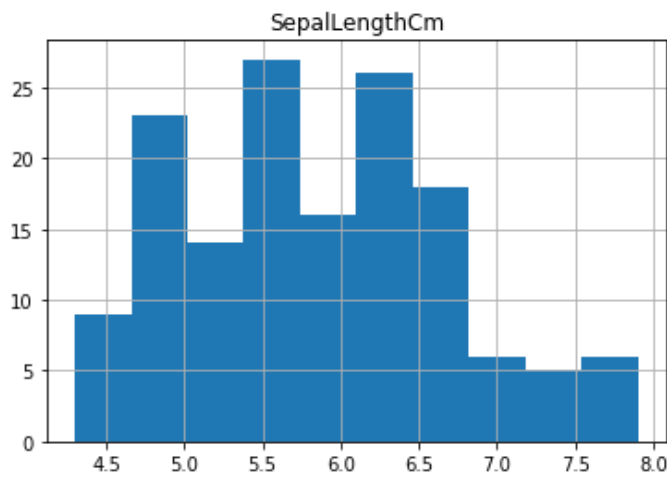
```
df2=pd.DataFrame(data)
df2['Species'].value_counts().plot(kind='bar')
plt.figure()
df2.hist(column='SepalLengthCm')
plt.figure()
df2.hist(column='SepalWidthCm')
plt.figure()
df2.hist(column='PetalLengthCm')
plt.figure()
df2.hist(column='PetalWidthCm')
```

Out[5]:

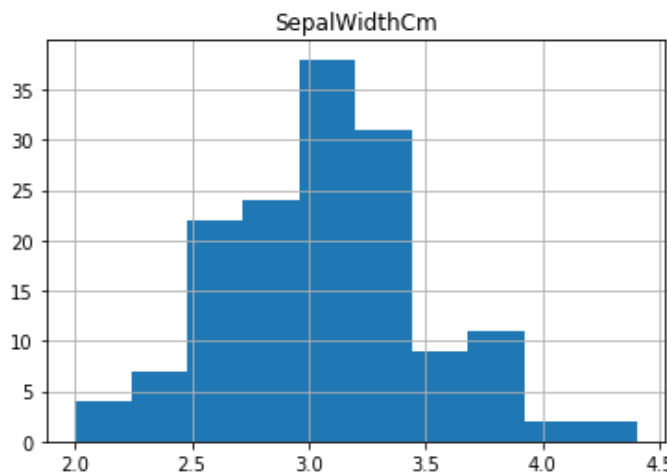
```
array([[<matplotlib.axes._subplots.AxesSubplot object at 0x000002388CDB1A48>]],
      dtype=object)
```



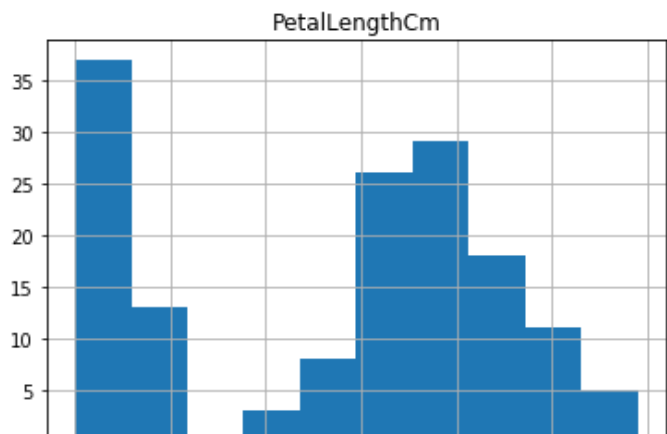
<Figure size 432x288 with 0 Axes>

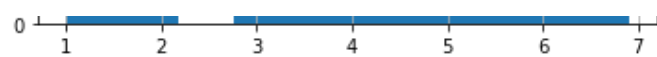


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