```python
In [1]:  import pandas as pd
```

```python
In [2]:  import numpy as np
```

```python
In [4]:  df=pd.read_csv(r'C:\Users\user\OneDrive\Desktop\cpp\Iris.csv')
```

```python
In [5]:  df.head(5)
```

Out[5]:

	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

```python
In [6]:  df.tail(5)
```

Out[6]:

	Id	SepalLengthCm	SepalWidthCm	PetalLengthCm	PetalWidthCm	Species
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

```python
In [7]:  df.shape
```

Out[7]: (150, 6)

```python
In [9]:  df.columns
```

Out[9]: Index(['Id', 'SepalLengthCm', 'SepalWidthCm', 'PetalLengthCm', 'PetalWidthCm',
        'Species'],
       dtype='object')

```
In [10]: 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
```

```
In [11]: df.describe()
```

Out[11]:

	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 [12]: import seaborn as sns
```

```
In [13]: sns.pairplot(df)
```

Out[13]: <seaborn.axisgrid.PairGrid at 0x15e4dc17730>
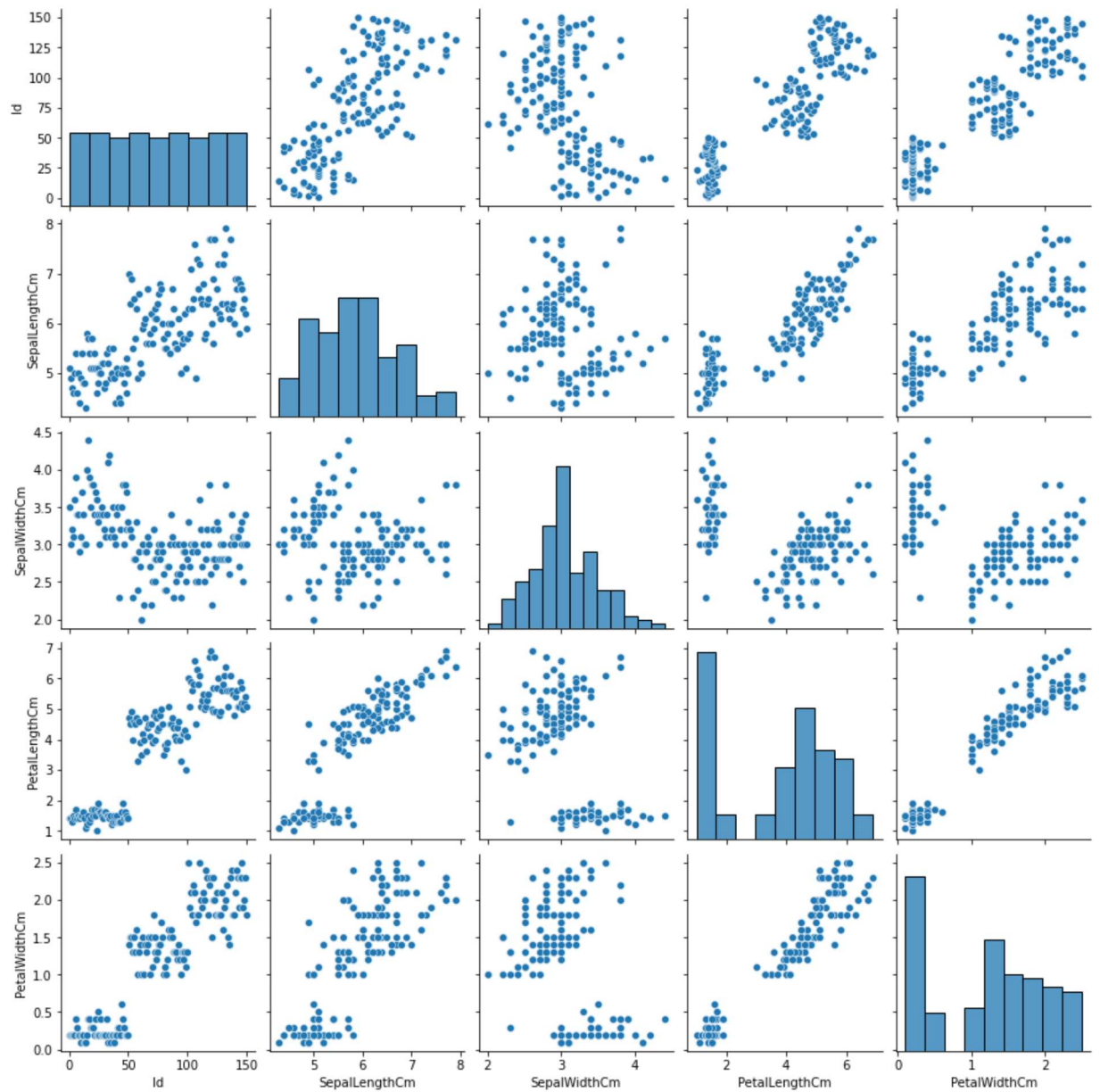
```
In [14]:   from matplotlib import pyplot as plt
```

```
In [17]:   df.hist(bins=15)
```
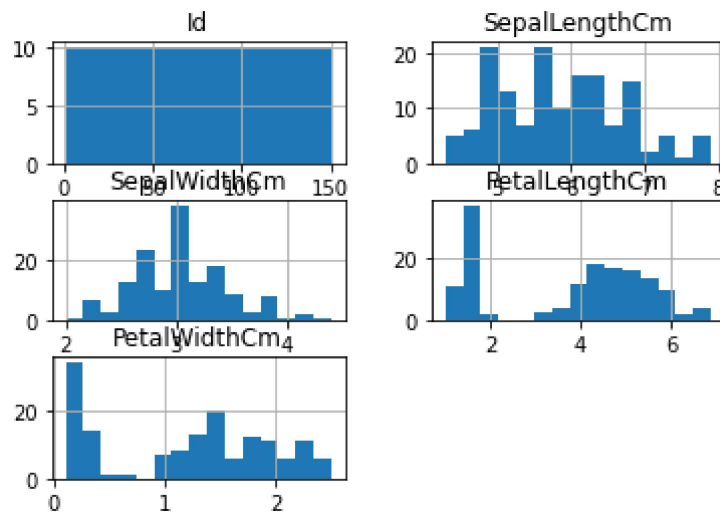
```
Out[17]:   array([[<AxesSubplot:title={'center':'Id'}>,
                   <AxesSubplot:title={'center':'SepalLengthCm'}>],
                  [<AxesSubplot:title={'center':'SepalWidthCm'}>,
                   <AxesSubplot:title={'center':'PetalLengthCm'}>],
                  [<AxesSubplot:title={'center':'PetalWidthCm'}>, <AxesSubplot:>]],
                 dtype=object)
```
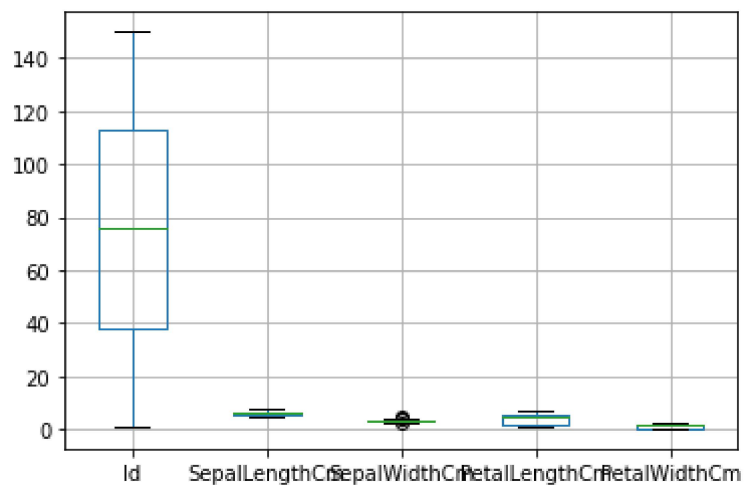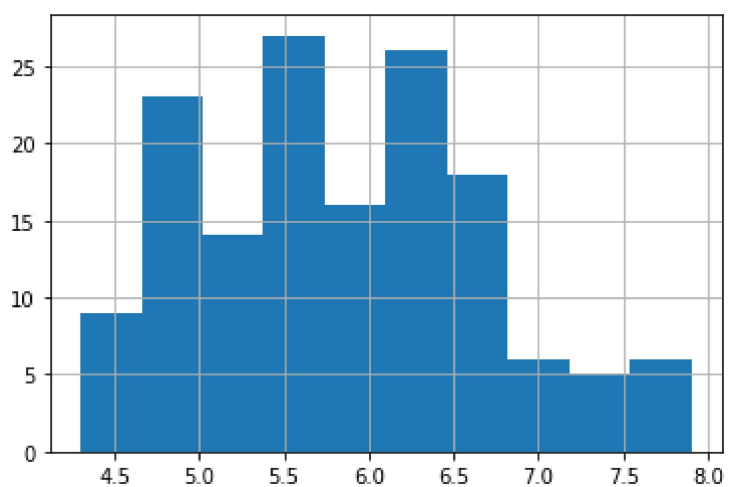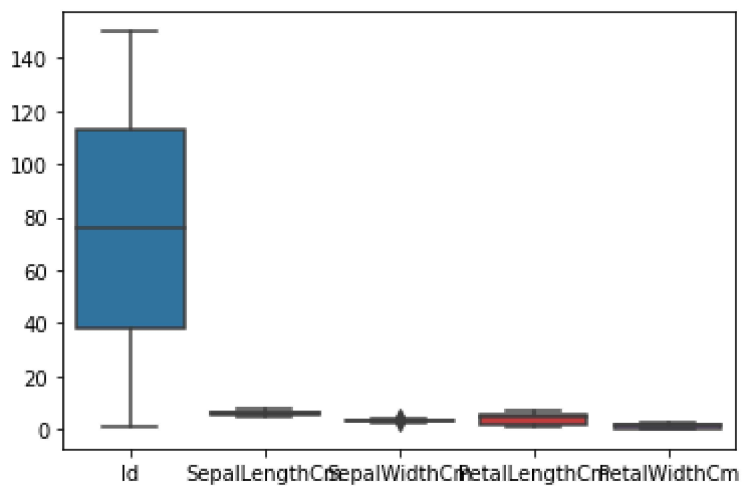


```
In [18]:   df.boxplot()
```

```
Out[18]:   <AxesSubplot:>
```

In [19]: `df['SepalLengthCm'].hist()`

Out[19]: `<AxesSubplot:>`

In [24]: `sns.boxplot(data=df)`

Out[24]: `<AxesSubplot:>`

In [ ]: