```
from google.colab import files
uploaded_file = files.upload()
```

Choose Files Iris.csv

- **Iris.csv**(text/csv) - 5107 bytes, last modified: 16/1/2024 - 100% done

```
Saving Iris.csv to Iris.csv
```

```
import pandas as pd
import seaborn as sns

import io
```

```
data = pd.read_csv(io.BytesIO(uploaded_file['Iris.csv']))
data.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
```

```
data.isnull().sum() # checking for null values in any of the columns
```

```
Id               0
SepalLengthCm    0
SepalWidthCm     0
PetalLengthCm    0
PetalWidthCm     0
Species          0
dtype: int64
```

```
data = data.drop(["Id"], axis=1) # dropping the 'Id' column, as it is unnecessary
data.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 150 entries, 0 to 149
Data columns (total 5 columns):
 #   Column         Non-Null Count  Dtype
---  ------         --------------  -----
 0   SepalLengthCm  150 non-null    float64
 1   SepalWidthCm   150 non-null    float64
 2   PetalLengthCm  150 non-null    float64
 3   PetalWidthCm   150 non-null    float64
 4   Species        150 non-null    object
dtypes: float64(4), object(1)
memory usage: 6.0+ KB
```

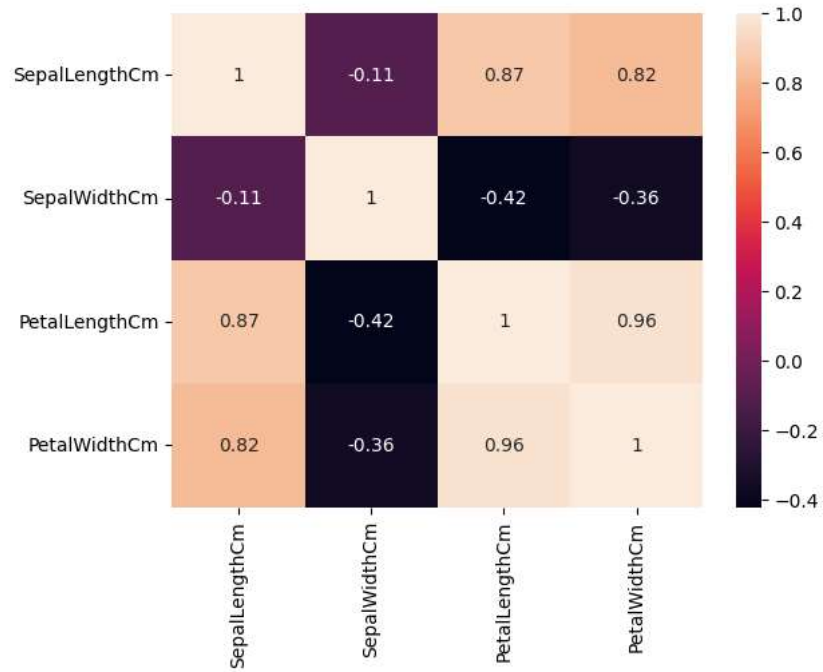
```
data.Species.replace({"Iris-setosa":"setosa", "Iris-versicolor":"versicolor", "Iris-virginica":"virginica"},inplace=True)
```

```
data.describe().T
```

	count	mean	std	min	25%	50%	75%	max
SepalLengthCm	150.0	5.843333	0.828066	4.3	5.1	5.80	6.4	7.9
SepalWidthCm	150.0	3.054000	0.433594	2.0	2.8	3.00	3.3	4.4
PetalLengthCm	150.0	3.758667	1.764420	1.0	1.6	4.35	5.1	6.9
PetalWidthCm	150.0	1.198667	0.763161	0.1	0.3	1.30	1.8	2.5

```
sns.heatmap(data.corr(),annot=True)
```

```
<ipython-input-8-6c71ac866e2e>:1: FutureWarning: The default value of numeric_only in DataFrame.corr is deprecated. In a future version,
  sns.heatmap(data.corr(),annot=True)
<Axes: >
```




```
sns.pairplot(data, hue="Species")
```

<seaborn.axisgrid.PairGrid at 0x79e73a0658a0>