In [1]:
```
import pandas as pd
import numpy as np
```

In [2]:
```
gp= pd.read_csv('iris.csv')
gp
```

Out[2]:

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

150 rows × 5 columns

In [3]:
```
gp.info()
```

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

In [4]:
```
gp.describe()
```

Out[4]:

	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 [6]:
```
gp.isnull()
```

Out[6]:

	sepal_length	sepal_width	petal_length	petal_width	species
0	False	False	False	False	False
1	False	False	False	False	False
2	False	False	False	False	False
3	False	False	False	False	False
4	False	False	False	False	False
...	...	...	...	...	...
145	False	False	False	False	False
146	False	False	False	False	False
147	False	False	False	False	False
148	False	False	False	False	False
149	False	False	False	False	False

150 rows × 5 columns

In [7]:
```
gp.isnull().any()
```

Out[7]:
```
sepal_length    False
sepal_width     False
petal_length    False
petal_width     False
species         False
dtype: bool
```

In [10]:
```
gp.dtypes
```

Out[10]:
```
sepal_length    float64
sepal_width     float64
petal_length    float64
petal_width     float64
species          object
dtype: object
```

In [14]:
```
pd.get_dummies(gp,dtype='int')
```

Out[14]:

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

150 rows × 7 columns

In [ ]:
```
```