

a2d4o8atw

May 9, 2023

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[36]: # to create this type of file press ctrl+shift+p and search Create New jupyter_
      ↪notebook and click on it.
      # You can search dataset on Kaggle.com
      import pandas as pd
      import numpy as np
```

```
[37]: df = pd.read_csv("Iris.csv") # we stored iris.csv file in df i.e dataframes or_
      ↪variable name
```

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[38]: df
```

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[38]:
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	Id	SepalLengthCm	SepalWidthCm	PetalLengthCm	PetalWidthCm	\
0	1	5.1	3.5	1.4	0.2	
1	2	4.9	3.0	1.4	0.2	
2	3	4.7	3.2	1.3	0.2	
3	4	4.6	3.1	1.5	0.2	
4	5	5.0	3.6	1.4	0.2	
..	
145	146	6.7	3.0	5.2	2.3	
146	147	6.3	2.5	5.0	1.9	
147	148	6.5	3.0	5.2	2.0	
148	149	6.2	3.4	5.4	2.3	
149	150	5.9	3.0	5.1	1.8	

	Species
0	Iris-setosa
1	Iris-setosa
2	Iris-setosa
3	Iris-setosa
4	Iris-setosa
..	...
145	Iris-virginica
146	Iris-virginica
147	Iris-virginica
148	Iris-virginica
149	Iris-virginica

[150 rows x 6 columns]

```
[39]: df.isnull()
```

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[39]:
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	Id	SepalLengthCm	SepalWidthCm	PetalLengthCm	PetalWidthCm	Species
0	False	False	False	False	False	False
1	False	False	False	False	False	False
2	False	False	False	False	False	False
3	False	False	False	False	False	False
4	False	False	False	False	False	False
..
145	False	False	False	False	False	False
146	False	False	False	False	False	False
147	False	False	False	False	False	False
148	False	False	False	False	False	False
149	False	False	False	False	False	False

[150 rows x 6 columns]

```
[40]: df.isnull().any()
```

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[40]:
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Id	False
SepalLengthCm	False
SepalWidthCm	False
PetalLengthCm	False
PetalWidthCm	False
Species	False

dtype: bool

```
[41]: df.dtypes # dtypes stands for data types
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[41]:
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Id	int64
SepalLengthCm	float64
SepalWidthCm	float64
PetalLengthCm	float64
PetalWidthCm	float64
Species	object

dtype: object

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[42]: df["Species"].unique()
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[42]: array(['Iris-setosa', 'Iris-versicolor', 'Iris-virginica'], dtype=object)
```

```
[43]: df["Species"] = df["Species"].replace({'Iris-setosa':1, 'Iris-versicolor':2, 'Iris-virginica':3})
```

```
[44]: df.dtypes
```

```
[44]: Id                int64
      SepalLengthCm    float64
      SepalWidthCm     float64
      PetalLengthCm    float64
      PetalWidthCm     float64
      Species          int64
      dtype: object
```

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[ ]:
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