

Program:

```
from sklearn.cluster import KMeans

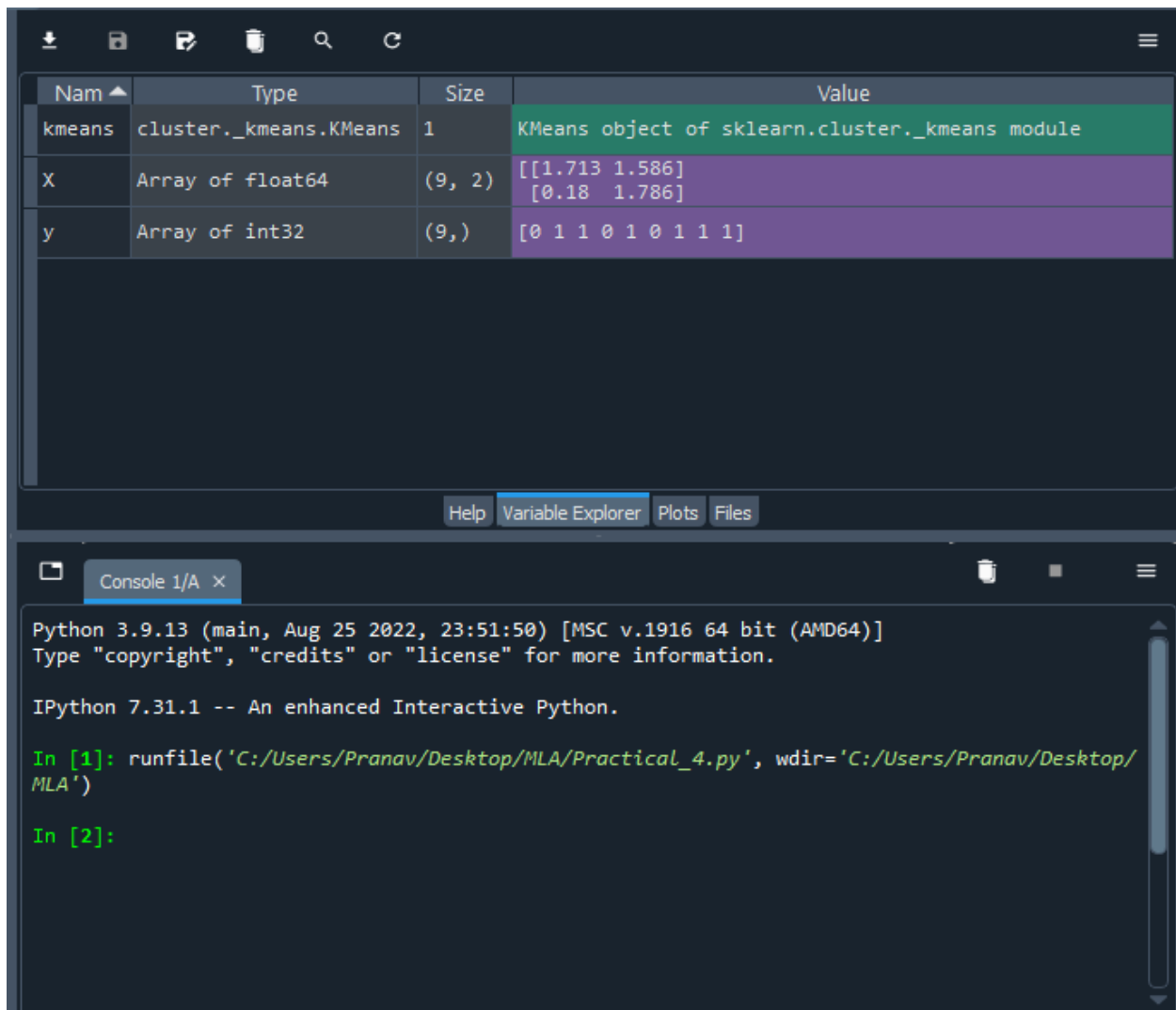
import numpy as np

X = np.array([[1.713,1.586], [0.180,1.786], [0.353,1.240],[0.940,1.566], [1.486,0.759],
[1.266,1.106],[1.540,0.419],[0.459,1.799],[0.773,0.186]])

y=np.array([0,1,1,0,1,0,1,1,1])

kmeans = KMeans(n_clusters=3, random_state=0).fit(X,y)
```

Output:



The screenshot displays a Jupyter Notebook interface. The top section, the Variable Explorer, shows the following variables:

Name	Type	Size	Value
kmeans	cluster._kmeans.KMeans	1	KMeans object of sklearn.cluster._kmeans module
X	Array of float64	(9, 2)	[[1.713 1.586] [0.18 1.786]
y	Array of int32	(9,)	[0 1 1 0 1 0 1 1 1]

The bottom section, the console, shows the following output:

```
Python 3.9.13 (main, Aug 25 2022, 23:51:50) [MSC v.1916 64 bit (AMD64)]
Type "copyright", "credits" or "license()" for more information.

IPython 7.31.1 -- An enhanced Interactive Python.

In [1]: runfile('C:/Users/Pranav/Desktop/MLA/Practical_4.py', wdir='C:/Users/Pranav/Desktop/MLA')

In [2]:
```