

EXP 10:

```
from sklearn.mixture import GaussianMixture
```

```
import numpy as np
```

```
X = np.array([[1],[2],[3],[10],[11],[12]])
```

```
model = GaussianMixture(n_components=2)
```

```
model.fit(X)
```

```
labels = model.predict(X)
```

```
print("Cluster Labels:", labels)
```



The screenshot shows an IDLE Shell window titled 'IDLE Shell 3.13.7'. The window contains the following text:

```
Python 3.13.7 (tags/v3.13.7:bceelc3, Aug 14 2025, 14:15:11) [MSC v.1944 64 bit (AMD64)] on win32
Enter "help" below or click "Help" above for more information.

>>> = RESTART: C:\Users\spark\OneDrive\Documents\Desktop\ITA-0612\EXP-10.py
Cluster Labels: [1 1 1 0 0 0]
>>>
```

The status bar at the bottom right indicates 'Ln: 6 Col: 0'.