In [16]:

```python
import pandas as pd
from sklearn.cluster import KMeans
import matplotlib.pyplot as plt
from sklearn import preprocessing
```

In [17]:

```python
data = pd.read_csv('player_data2.csv')
data.head()
```

Out[17]:

	feature_1	feature_2
0	-2.318359	8.973845
1	0.409868	1.623505
2	8.073112	-0.394466
3	-0.234135	5.625724
4	8.746417	-1.393468

In [18]:

```python
scaledData = preprocessing.MinMaxScaler().fit_transform(data)
scaledData = pd.DataFrame(scaledData, columns = data.columns)
scaledData.head ()
```

Out[18]:

	feature_1	feature_2
0	0.132699	0.868507
1	0.343978	0.330873
2	0.937431	0.183270
3	0.294105	0.623612
4	0.989573	0.110199

In [19]:

```python
image, axes = plt.subplots (figsize = (8,6))
axes.scatter (scaledData.feature_1, scaledData.feature_2, s = 50)
axes.set_title ('PLAYER FEATURES', fontsize = 20)
axes.set_ylabel ('Feature 1', fontsize = 20)
axes.set_xlabel ('Feature 2', fontsize = 20)
```

Out[19]:

Text(0.5, 0, 'Feature 2')
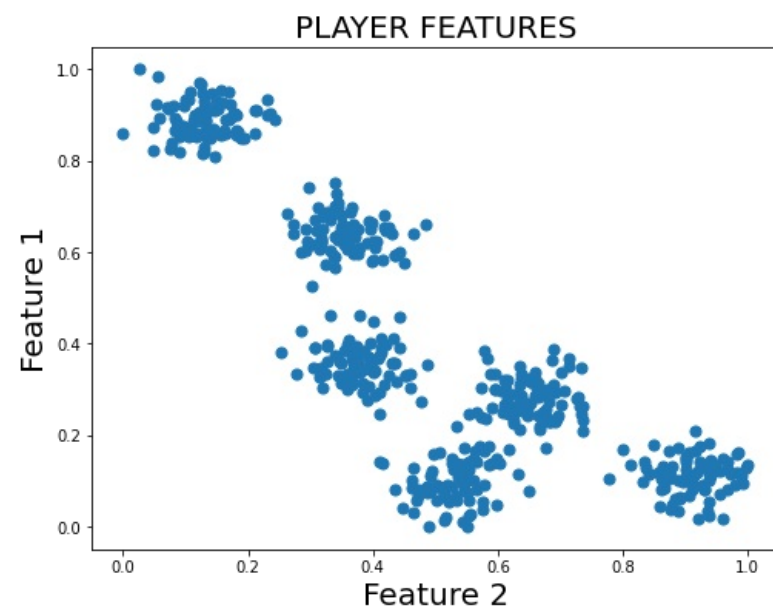
```
kmeans = KMeans (n_clusters = 6)
kmeans.fit (scaledData)
cluster_centers = kmeans.cluster_centers_
```
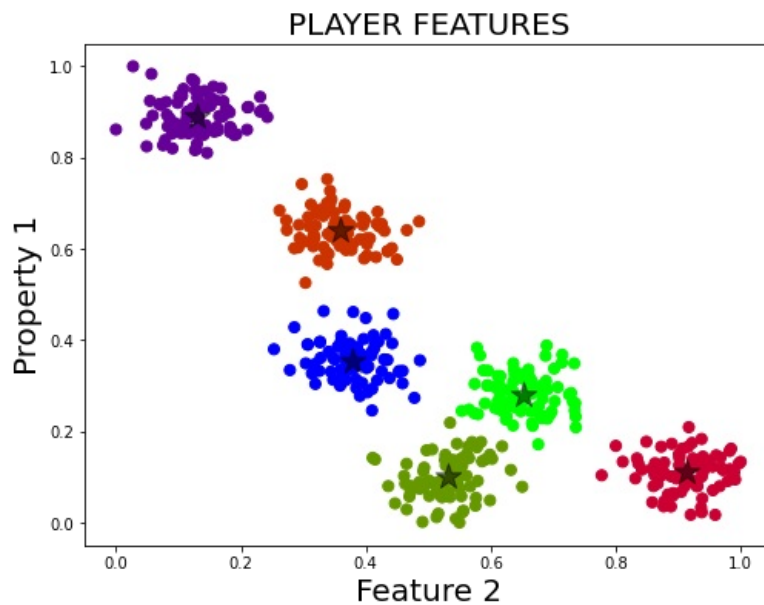
```
image, axes = plt.subplots (figsize = (8,6))

axes.scatter (scaledData.feature_1, scaledData.feature_2, s = 50, c = kmeans.labels_, cmap = "brg")
axes.scatter (cluster_centers[:, 0], cluster_centers[:, 1], c = 'black', s = 300, alpha = 0.5, marker = '*')
axes.set_title ('PLAYER FEATURES', fontsize = 20)
axes.set_ylabel ('Property 1', fontsize = 20)
axes.set_xlabel ('Feature 2', fontsize = 20)
```

Out[21]:

Text(0.5, 0, 'Feature 2')

In [ ]: