

## Cluster Centers

The code used in creating cluster centers is given below:

```
kmeans = KMeans(k=3, seed=1)
model = kmeans.fit(scaledData)
transformed = model.transform(scaledData)
```

```
centers = model.clusterCenters()
centers
```

Cluster centers formed are given in the table below

Cluster #	Center
1	41.07, 10.29, 145.51
2	34.28, 6.45, 67.22
3	26,30 4.48, 17.07

These clusters can be differentiated from each other as follows:

Cluster 1 is different from the others in that users with the highest revenue and adclick are also the ones who make more buyclicks

Cluster 2 is different from the others in that the users who generate medium revenue also click in ads and buy in an average way

Cluster 3 is different from the others in that the users who make the least revenue are also the ones who click the least in ads and buy.

Below you can see the summary of the train data set:

	<b>totalAdClicks</b>	<b>totalBuyClicks</b>	<b>totalRevenue</b>
<b>0</b>	44	9	21.0
<b>1</b>	10	5	53.0
<b>2</b>	37	6	80.0
<b>3</b>	19	10	11.0
<b>4</b>	46	13	215.0