|  |
| --- |
| **WQD7006**  **Machine Learning for Data Science**  **K-means** |

Answer the questions using BMW dataset:

1. Perform a K-means clustering using K = 3. Remove Customer ID. Observe the results

A screenshot of a cell phone

Description automatically generated

1. Perform the same test as above but increase K to 5. Assume you’re a BMW dealer:
   1. Which cluster will be point of interest for you? Why?
   2. Which cluster would be the least of your interest?
   3. What can you comment about Cluster 0?

A close up of a piece of paper

Description automatically generated

1. Visualize (2) above using M5 as x-axis and Purchase as y-axis.

A screenshot of a social media post

Description automatically generated

1. Try with weather dataset. Run K = 2. Observe the results.

Now, choose ‘play’ for evaluation, and run the test again.

A screenshot of a computer

Description automatically generated

A screenshot of a computer

Description automatically generated

**Additional exercises:**

1. Other dataset to explore – iris dataset. Perform hierarchical clustering