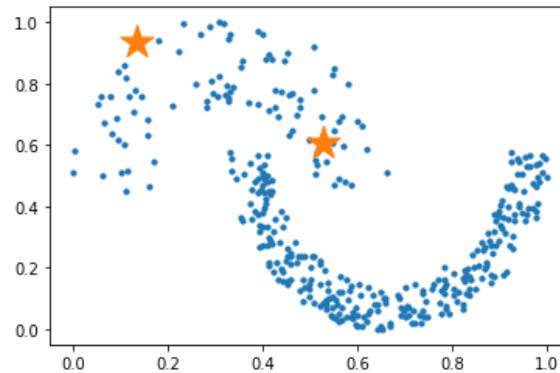


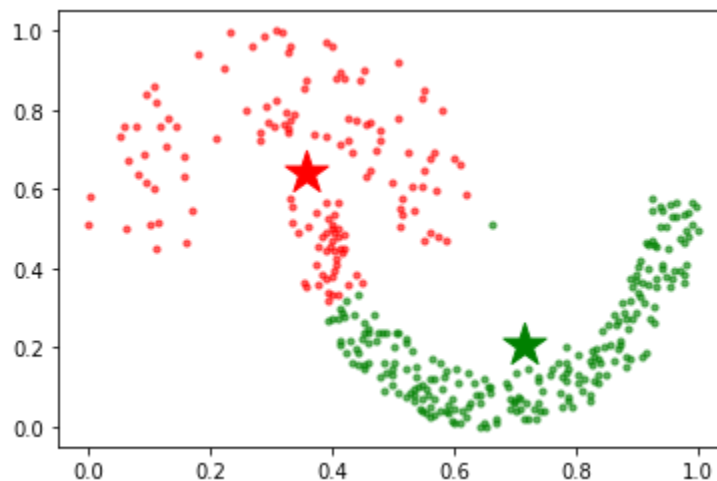
# K-Means Clustering Implementation

You need to complete the following tasks in this assignment:

1. Load Data (Samples & Initial Centroids) into **numpy** arrays and plot initial graph: **10%**
  - a. **Uploaded into the eLMS**



2. Implement the K-Means Clustering Algorithm: **60%**
3. Plot the Scatter plots showing the clusters with centroids and each cluster in a separate color like the following: **30%**



**Logistic Regression Binary Classifier Algorithm:**

[Kmeans Algorithm Steps](#)

**Instructions:**

- ❖ You **MUST USE the PROVIDED DATASET**
- ❖ You **must follow the steps mentioned in** [Kmeans Algorithm Steps](#)
- ❖ **Any sort of plagiarism will result in negative marking**
- ❖ Implement in Python

- ❖ **DO NOT USE** libraries such as: "**Sklearn**", "**Scikit learning**" for steps 2-3
- ❖ Generalize data loading and generation predictions from classifier so that you can easily run the training and evaluation on new dataset during viva