Offline 1: Bisecting K-Means Algorithm

In your next offline assignment task you have to apply two algorithmic procedure in the given dataset:

- 1. Simple basic K-means algorithm with provided k as input.
- 2. Bisecting K-means algorithm where you have to split the cluster with most error, applying k-Means(k=2) algorithm.

Make Bisecting K-Means generic meaning it could be applied as n-secting K means

B Section You have another additional offline as this will be your last offline.

Offline 2: Template matching

- 1. Template matching algorithm with correlation approach
- 2. Template matching algorithm with logarithmic approach
- 3. Template matching algorithm with hierarchical approach

Sample input will be two image one reference image and another template image. Your task will be to find out the template image in the reference image using above three approach.

Use graphical display to show your output. display the image and marked the template image that you have located applying above algorithm.