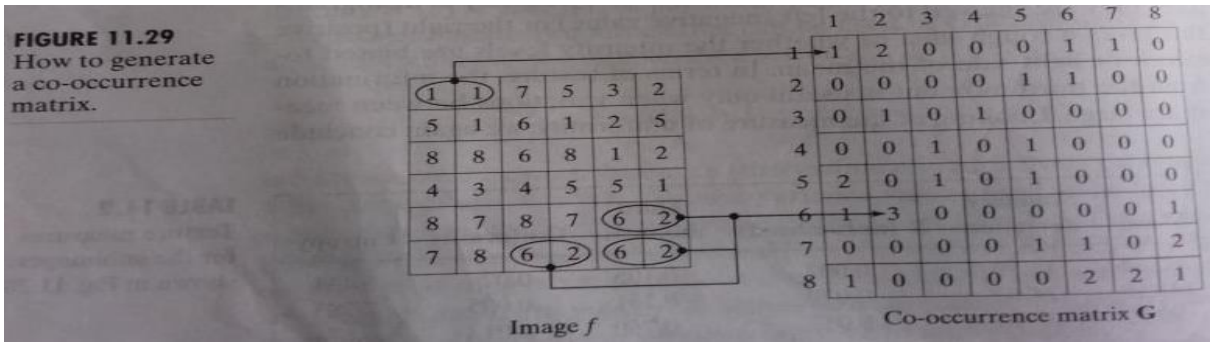
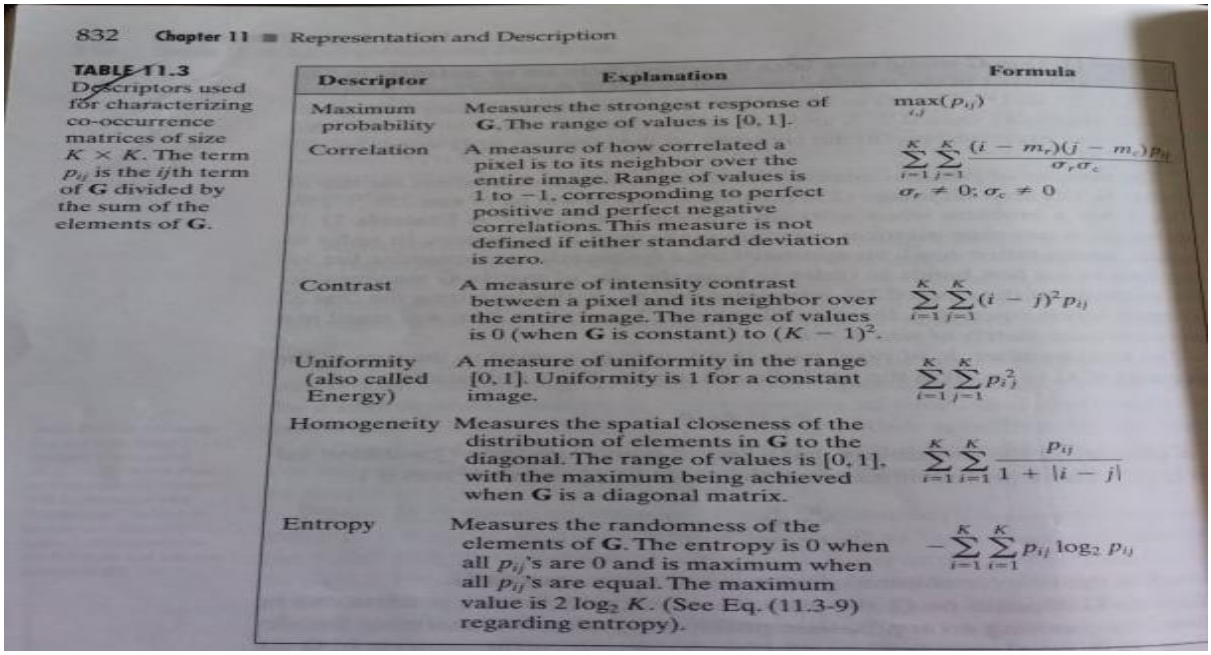
Project 3(b)

Similar Image Retrieval using Canberra Distance

Show the 10 most similar images of **a given object** for **Coil-80** dataset using *Canberrea* distance and following *texure features*: Maximum probability, Correlation, Contrast, Uniformity (Energy), Homogeneity, and Entropy, of **gray-level co-occurance matirx of image**.





The Canberra distance *d* between vectors **p** and **q** in an *n*-dimensional real vector space is given as follows:

$$d(\mathbf{p}, \mathbf{q}) = \sum_{i=1}^{n} \frac{|p_i - q_i|}{|p_i| + |q_i|}$$

Use **GUI.** A sample GUI is shown below: