1.       Physical camera parameters

2.       Threshold selection by best approximation with a two level image

3.       Region filling by morphological and sets operations

4.       Canny edge detector

5.       In the following non-uniformly illuminated gray-levels image there are several rice grains. Propose a solution based on image processing for computing the number of grains that are fully visible in the image. Describe in pseudo-code the proposed solution.

1.       Modeling the camera lens distortions.

2.       Simple geometric properties evaluation from images and projections.

3.       Signal-to-Noise Ratio (SNR) definition, significance and evaluation.

4.       Frequency domain filtering.

5.       In the following gray-levels image there are several identical coins. Propose a solution based on image processing for automatic counting the coins. Describe in pseudo-code the proposed solution.