

Task 4:

Shown below is an image with circles and squares of various sizes. Some of the objects have one or two holes in them.

Provide an algorithm that uses morphological and logical operations to answer the questions below. The answers may be in the form of Pseudocode with a block diagram.

- (a) What fraction of the image pixels is white?
- (b) How many objects are in the image?
- (c) How many holes are in the image?
- (d) How many objects have one or more holes?
- (e) How many square objects are in the image?
- (f) Identify the square objects that have holes.
- (g) Identify the circular objects that have no holes.

