NOTE: USE OPENCV FOR ALL THE QUESTIONS and GIVE EXPLANATIONS FOR WHAT METHOD/TECHNIQUE/APPROACH USED

ATTACH THE CODE AND THE OUTPUT IMAGE FOR ALL THE TASKS AND THEN SUBMIT

1. Given a random image 'img' complete the following task

   Find the centroid of this figure by writing the Python OpenCV code.

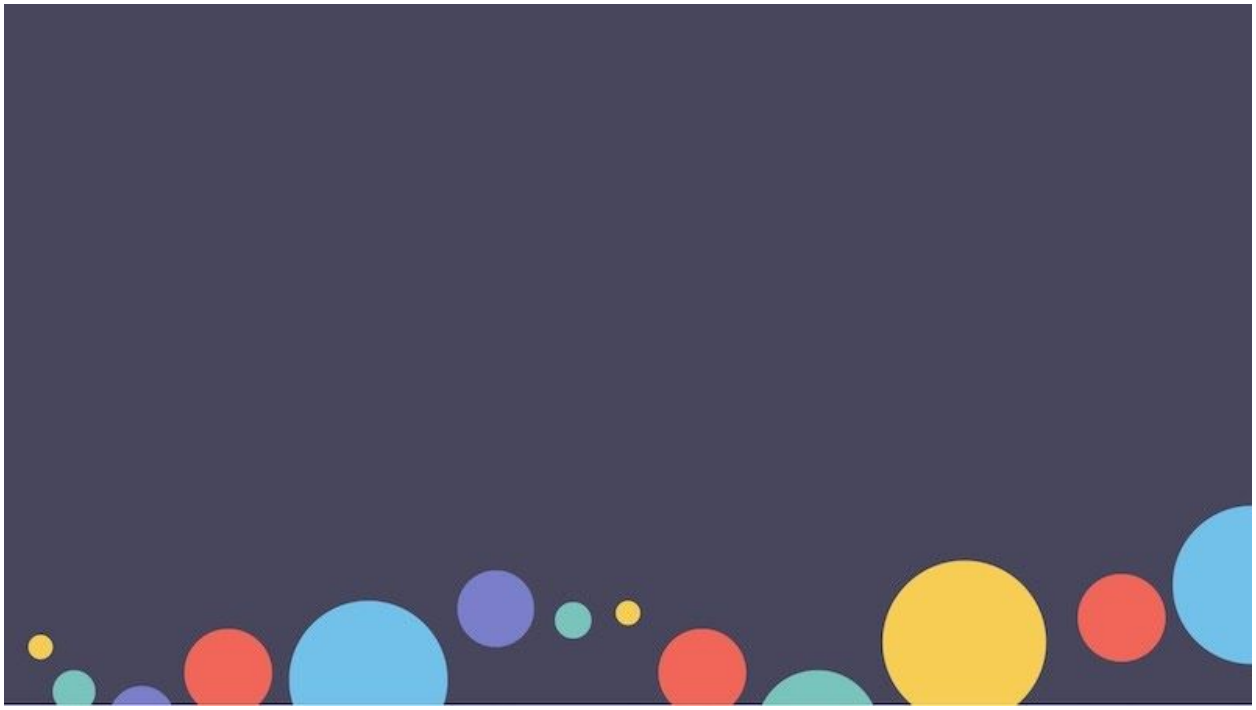
   Size of image:
   0< width < 1000 ...in pixels
   0< height < 1000 ...in pixels

   Input:
   Input image 'img'

   Output:
   The centroid coordinates of the object in the terminal.

NOTE: The image for this problems statement is given as an attachment

2. Convert the given images to grayscale and binary and state the significance of converting the images(what are the advantages of converting it in computer vision)?



3. Using OpenCV methods find out the type of noise in the given image and try your best to denoise it using various denoising techniques. Write about which methods you tried and which method was the best?

4. How would you isolate the hand from the background in the given image? Explain the advantages and disadvantages of your method of isolation?

Make sure you use the image which is given below the respective question.