

## Module 2

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Name:

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**(1) How would you write a nested for loop to iterate through all the pixels in an image? (10 pts)**

1. for i in range(0, height \* width):
2. for row in range(0, height):  
    for pixel in range(0, width):
3. for col in range(0, width):  
    for row in range(0, height):
4. for pixel in range(0, width):  
    for row in range(0, height):
5. None of the above

Answer:

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**(2) What is the purpose of thresholding in image processing? (10 pts)**

1. To search for values that exactly match black or white.
2. To select all pixels above a certain brightness value.
3. To convert an RGB image to greyscale.
4. To perform a filter on the image using a fixed value as the dividing point.
5. None of the above

Answer:

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**(3) The following pseudo code will detect what feature? (10 pts)**

For each row in the image:

    For each pixel in the row:

        Subtract the current pixel's RGB values with the pixel to the left

        Set the current pixel to this value.

1. Colors
2. Edges
3. Noise
4. Circles
5. None of the above

Answer:

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