takePicture( ) Takes a picture and returns a Myro object that represents an image. What is the Python type of the value that takePicture( ) returns? Find out by (1) printing the return value and by (2) printing what type( ) returns when called on the return value. Results____________________________
____________________________________________________________________________

show( p ) Displays the image returned by takePicture( ). If show( ) is called on a different picture, is a different window used for the display? Results____________________________
____________________________________________________________________________

savePicture( pic, 'officeScene.jpg') and savePicture( pic, 'officeScene.gif' ) are examples calling a Myro function to save a picture in a file, in two different image formats. Try them both. Where does Myro put the files when it does operations similar to these examples? Results____________________________
____________________________________________________________________________

Start GIMP from the Applications/Graphics menu. Use the File/Open dialog to "Open" both the .jpg and the .gif image for the same picture you took with Myro. Examine the two displays at various larger and smaller "zooms" (Hint: View/Zoom ... ). Can you see any differences between the .jpg and the .gif form? Results____________________________
____________________________________________________________________________

Open the Image/Image Properties window for both the .gif and the .jpg Report similarities and differences. Results____________________________
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Open the Dialog/Colors dialog. The resulting window is labelled FG/BG. In that window, click the button on the far right which is for "sliders". Note that the slider view shows the RGB values in slider bars as well as numbers.

Select Tools/Color Picker and observe that the cursor icon becomes an eyedropper. Observe how the color values are displayed when the eyedropper is clicked on image pixels. Try to find the largest and smallest red, green and blue values (6 values altogether) in the .jpg image. Also, find the RGB values for pixels that (a) appear brightest and (b) appear darkest, report RGB values for 3-4 of the brightest and 3-4 of the darkest pixels.

Results
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With the Color Picker (eyedropper) tool activated, select Dialogs/Tool Options to get a Tool Options window. In that window, check "Use info window" near the bottom. Now probe the pixels of the .gif image and observe what is in the Color Picker Info window. Pay attention to the "index" Repeat the observations you did for the .jpg image but also report what you see in the place of the index.

Results
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NEXT PHASE Experiment with AND RECORD observations for elements from LCR Chapter 9 as directed by Prof. Chaiken. Hand them in on yellow pads labeled with the names of the participating team members.

The directions are on the next page.
Phase 2

A paper copy of Ch. 9 of LCR, two pink balls and a yellow pad were distributed to each team.

(a) See page 219.

     Take a gray picture and a color picture of the same scene. Compare them with GIMP.

(b)

     (1) Set up a scene with the two pink balls on a dark background.
     (2) Take a color picture, use `show()`, and define the "blob" region around a ball.
         READ page 236.
     (3) \( \text{picB} = \text{takePicture( 'blob' )} \)
         \( \text{picC} = \text{takePicture( )} \)
         Compare those two pictures with GIMP and report data to support the robot finding a ball.
         Experiment and report with `getBlob(...)` too.

Report: ________________________________________________________________
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continue on other side...