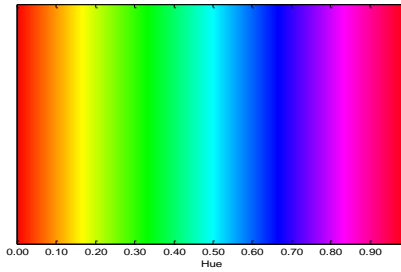


COM322 LAB4

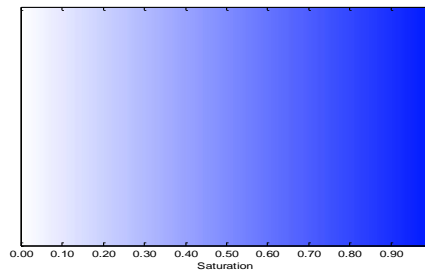
P1. Given the image **no-overtaking-sign.jpg** replace the black car with a green one. Display both images in separate figures (left given, right processed).



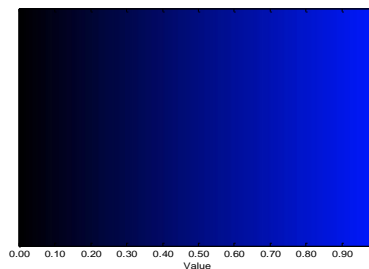
P2. a) Create an image and display the HSV color spectrum by converting the hue (at full saturation and brightness) to RGB values (MATLAB displays RGB images).



b) Create another image and display the change of saturation for a particular hue of your choice (full brightness and hue=0.65 in this case).

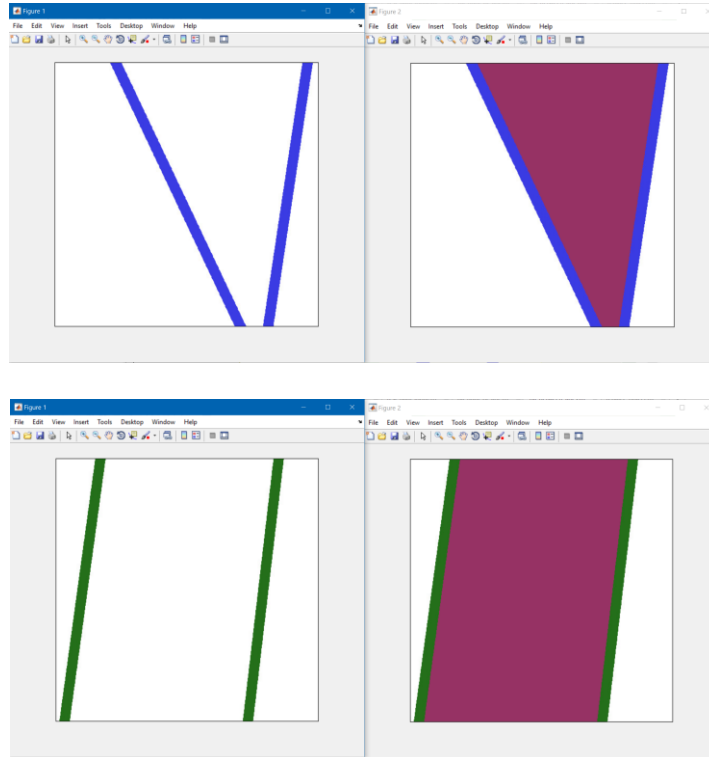


c) Create another image and display the change of brightness (value) for a particular hue of your choice (full saturation and hue=0.65 in this case).

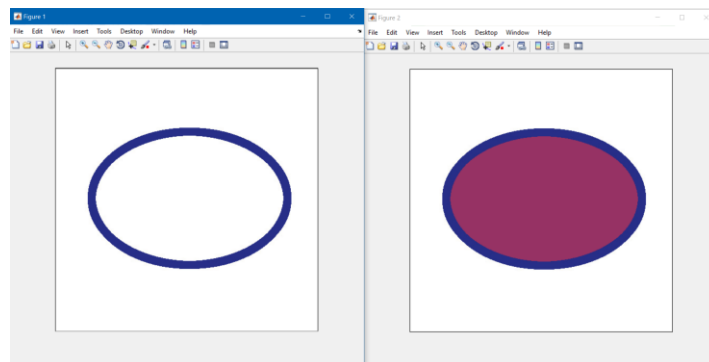


P3. Solve the Warhol's "Campbell's Soup Cans" problem of Lab 3 using the HSV model.

P4. Write a program that paints the region between two lines in a given image. Test your program for the given images **fill_between.jpg** and **fill_between2.jpg**.



Bonus check: modify to support oval shapes.



P5. Display the given fire truck image.



Then write code to select pixels corresponding to the body of the truck using ranges of hue and then display the selected pixels in a new figure as shown below.



P6. Build on problem 4 and display a range of colors replacing the original truck color. Your program should display a replacement color, pause for half a second and then display the next color.



