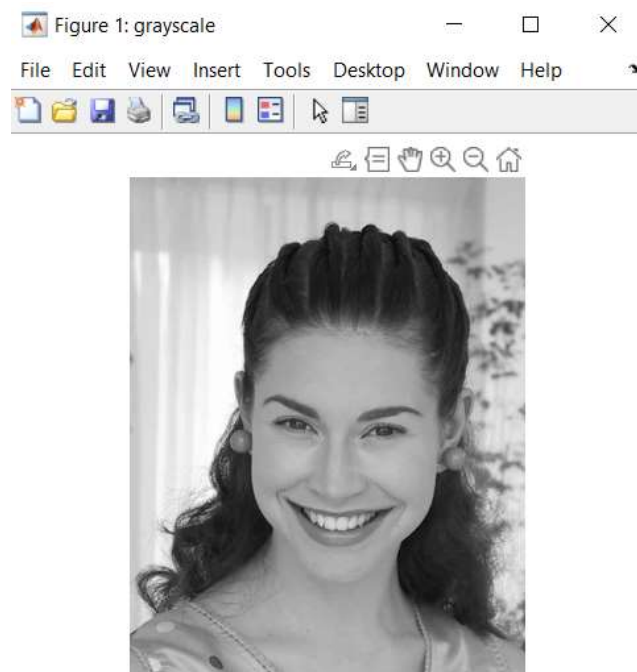


Classes 2 - Introduction to image processing, geometric transformations

Exercise 1 . Display picture portrait.jpg in a new figure. In the figure name display the color type of the image got with the use of imfinfo. Set the figure background color to white.

Output code :

```
info = imfinfo('portrait.jpg');  
L1=imread(info.Filename);  
figure(1);  
imshow(L1);  
set(1,'Name',info.ColorType,'Color',[1 1 1]);
```



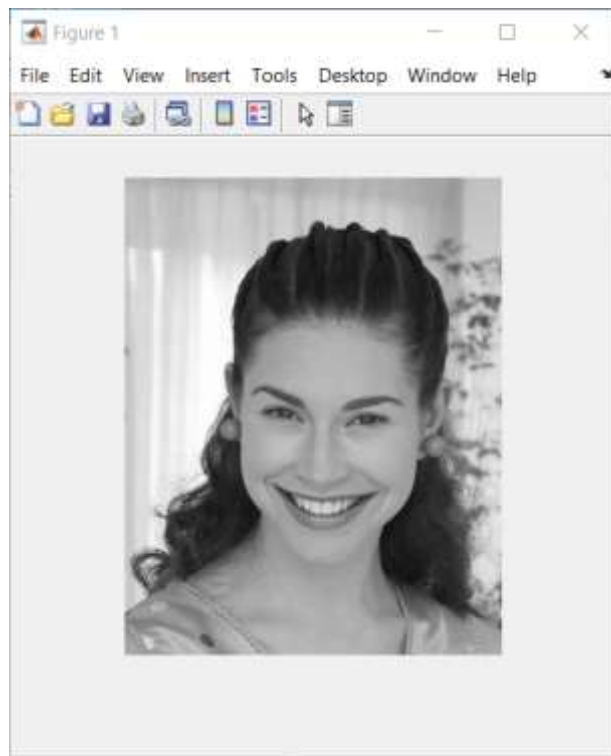
Pic.2.1

Exercise 2 . Basing on example 4, rotate the image on the same vector with retaining original surface.

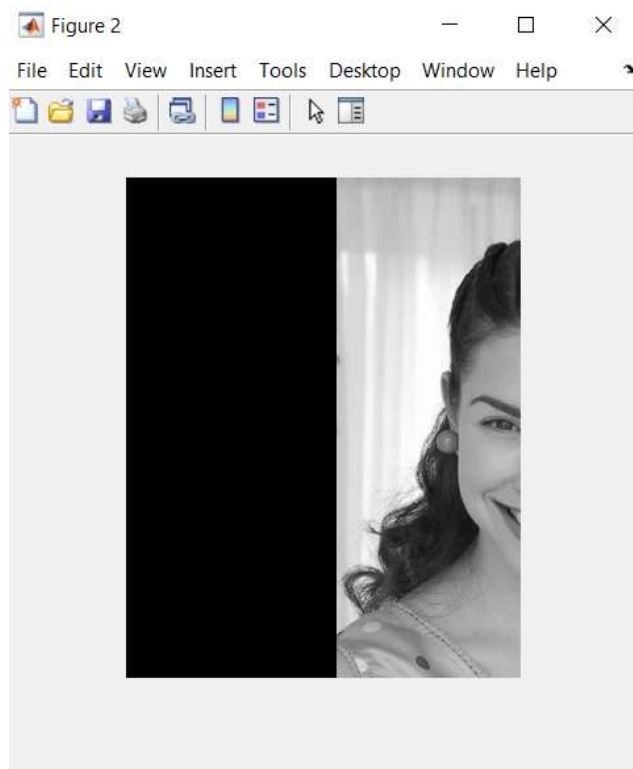
Output code :

```
m0=100;  
n0=160;  
L1=imread('portrait.jpg');  
figure(1);  
imshow(L1)  
[m1,n1]=size(L1);
```

```
L2= [zeros(m1,n0),L1;zeros(m0,(n0+n1))];  
figure(2);  
imshow(L1)  
hold on  
imshow(L2)  
hold off
```



Pic.2.2

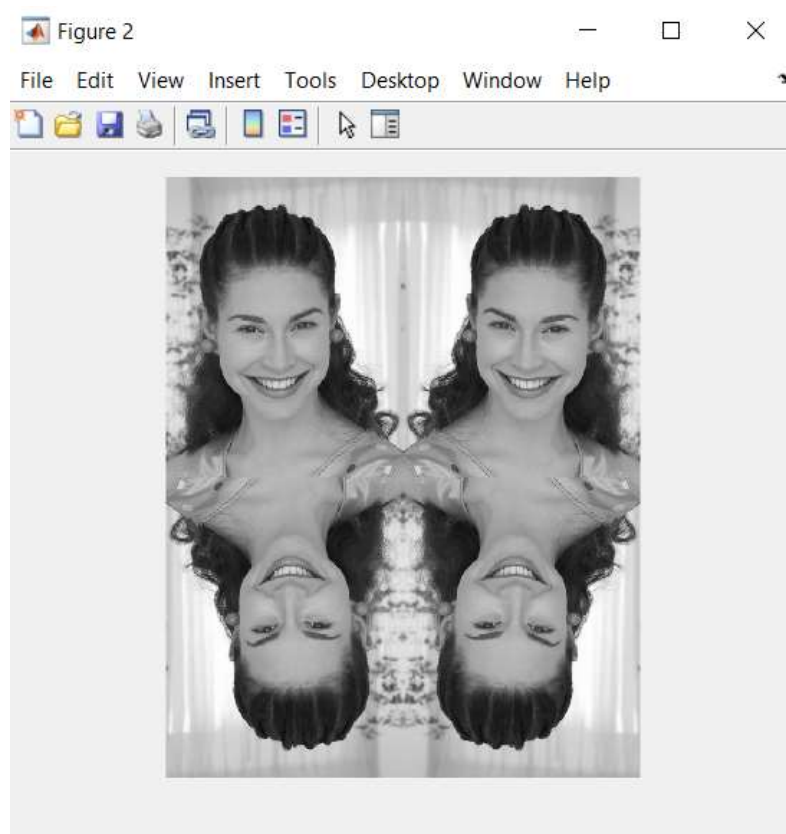


Pic.2.3

Exercise 3 . The "fliplr" (flip left-right) function flips the image (an array) about a vertical axis, "flipud" (flip up-down) - about a horizontal axis of the source image.

Output code :

```
L1=imread('portrait.jpg');  
L2 = fliplr(L1);  
L3 = flipud(L1);  
L4 = fliplr(L3);  
L_out = [L2,L1;L3,L4];  
imshow(L_out)
```



Pic.2.4

Conclusions : on this lesson had learned image processing and geometric transformations . Also had improved practical skills .