

```
%Write a Matlab program to perform Resize, Rotation of binary, Gray-scale and color images using various methods.
img=imread('cameraman.tif');
r1=imresize(img,3);
r2=imresize(img,[150,400]);
subplot(2,3,1),imshow(img),title("Original Image");
subplot(2,3,2),imshow(r1),title("Resized by scale 3");
subplot(2,3,3),imshow(r2),title("Resized by 150*400");
```

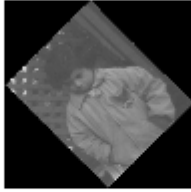


```
%Grayscale
im=imread('pout.tif');
a1=imresize(im,3);
a2=imresize(im,[150,400]);
imshow(im),title("Original Image");
imshow(a1),title("Resized by scale 3");
imshow(a2),title("Resized by 150*400");
```



```
img=imread('pout.tif');
b1=imrotate(img,45,"bilinear"); % imrotate(I,angle,method)
b2=imrotate(img,60,"bicubic");
b3=imrotate(img,90,"nearest");
b4=imrotate(img,180); % imrotate(I,angle)
b5=imrotate(img,270);
b6=imrotate(img,360);
subplot(3,3,1),imshow(b1),title("Rotate by 45");
```

Rotate by 45



Resized by scale 3

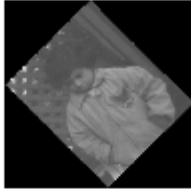


Resized by 150*400

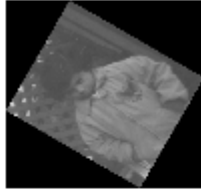


```
subplot(3,3,2),imshow(b2),title("Rotate by 60");
```

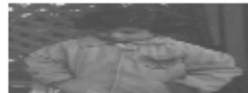
Rotate by 45



Rotate by 60



Resized by 150*400

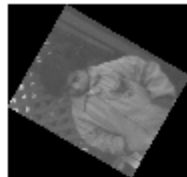


```
subplot(3,3,3),imshow(b3),title("Rotate by 90");  
subplot(3,3,4),imshow(b4),title("Rotate by 180");  
subplot(3,3,5),imshow(b5),title("Rotate by 270");  
subplot(3,3,6),imshow(b6),title("Rotate by 360");
```

Rotate by 45



Rotate by 60



Rotate by 90



Rotate by 180



Rotate by 270



Rotate by 360



```
%color image
```

```
i=imread('strawberry.jpg');
s1=imresize(i,10);
s2=imresize(i,[150,400]);
k1=imrotate(i,45,"bilinear");
k2=imrotate(i,60,"bicubic");
k3=imrotate(i,90,"nearest");
subplot(3,3,1),imshow(i),title("Original Image");
subplot(3,3,2),imshow(s1),title("Resized by scale 3");
subplot(3,3,3),imshow(s2),title("Resized by 150*400");
subplot(3,3,4),imshow(k1),title("Rotate by 45");
subplot(3,3,5),imshow(k2),title("Rotate by 60");
subplot(3,3,6),imshow(k3),title("Rotate by 90");
```

Original Image



Resized by scale 3



Resized by 150*400



Rotate by 45



Rotate by 60



Rotate by 90

