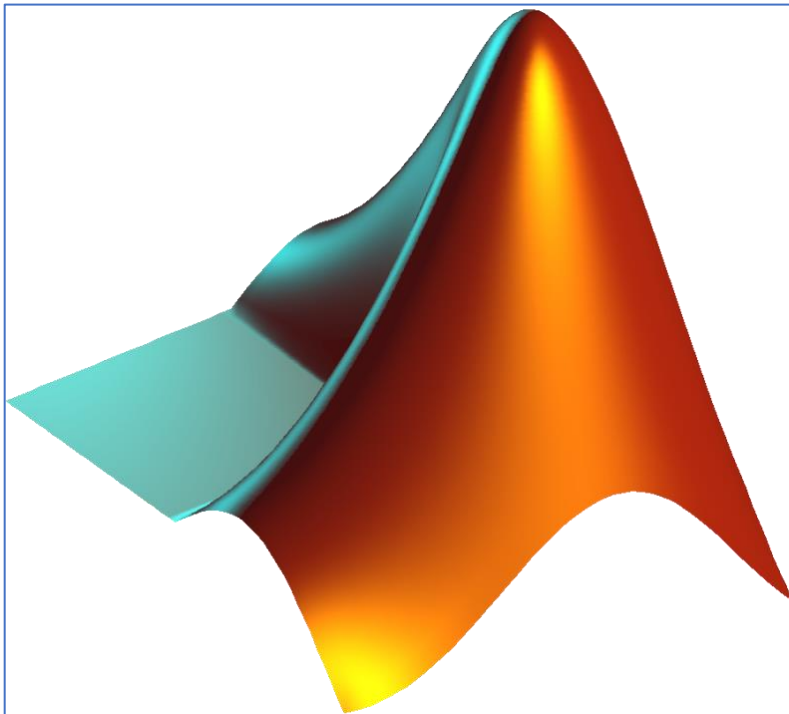


Image processing Assignment 1

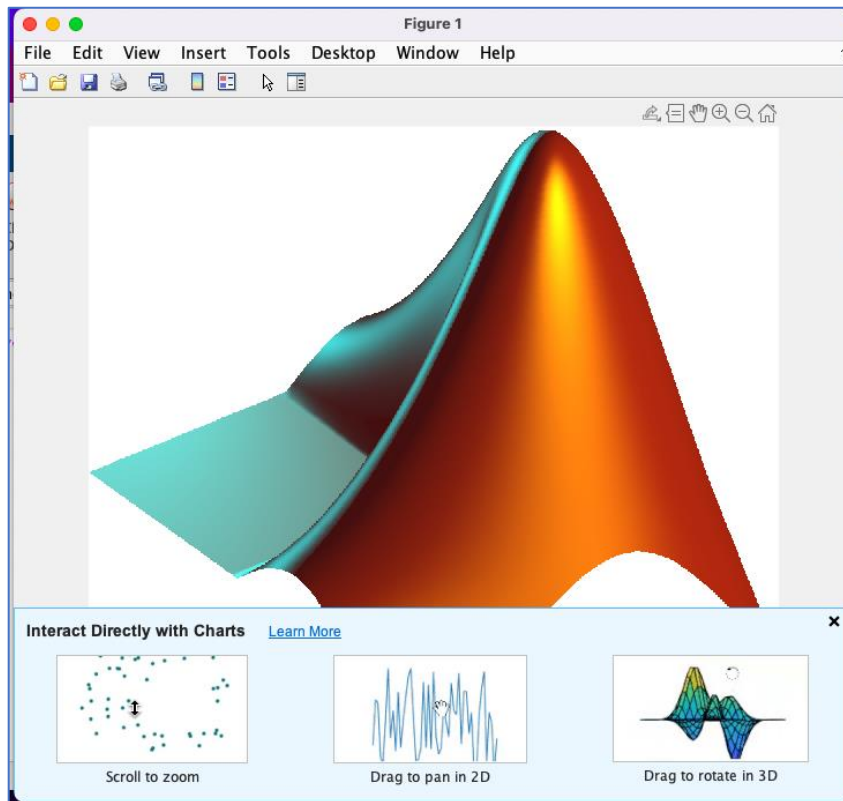
Tian Xiaoyang
26001904581

Task 1

- 1.1 Objective
to read images from device
- 1.2 Content
 - 1.2.1 input image



1.3 Result



1.4 Source code

The MATLAB R2022a - academic use interface is shown. The Command Window displays the following code:

```
>> im = imread('/Users/wcwe/Desktop/Mat_logo.jpg');  
imshow(im);  
>>  
>> im = imread('/Users/wcwe/Desktop/Mat_logo.jpg');  
imshow(im);  
>> im_a = imread('/Users/wcwe/Desktop/Mat_logo.jpg');  
imshow(im_a);  
im_b = imread('/Users/wcwe/Desktop/K0A_Nassau.jpeg');  
figure, imshow(im_b);  
f5 >> |
```

The Workspace panel on the right shows the following variables:

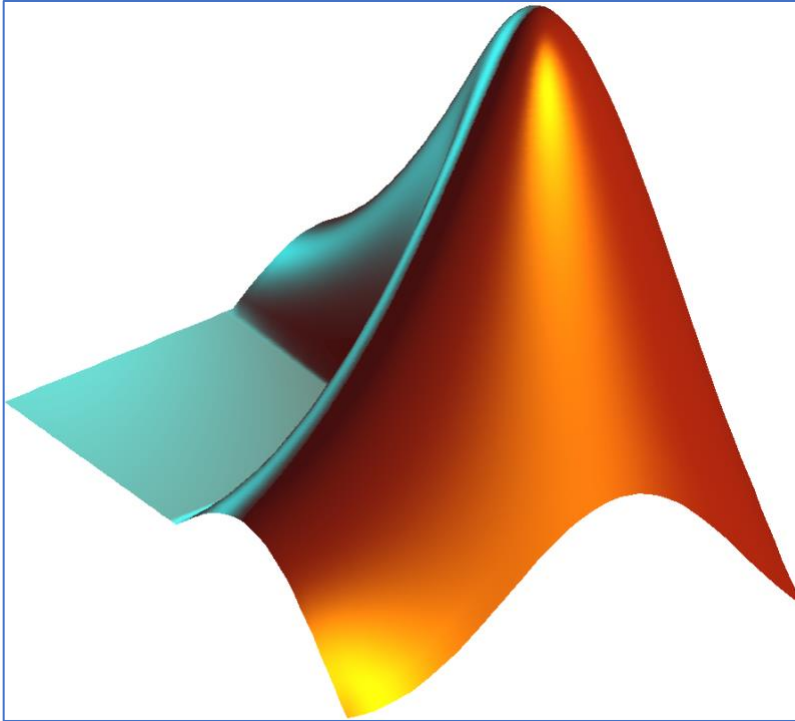
Name	Value
im	806x897x3 uint8
im_a	806x897x3 uint8
im_b	1080x1920x3 ui...

Task 2

2.1 Objective

to save an image to a file

2.2 Content



2.3 source code

```
>> imwrite(im, 'new_mat_logo.png');  
fx >> |
```

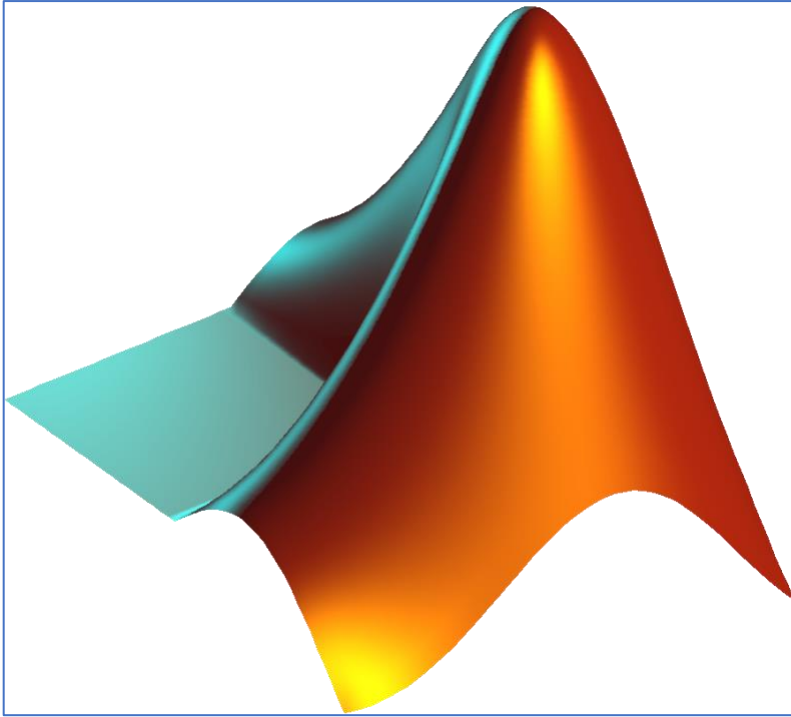
Task 3

3.1 objective

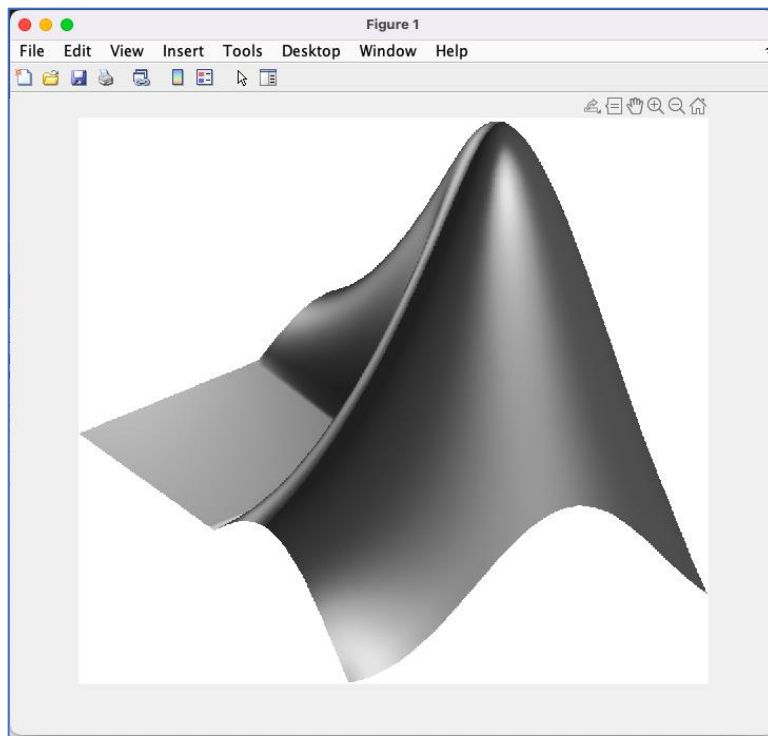
To turn images in colors to grayscale images

3.2 content

3.2.1 input image



3.3 result



3.4 source code

```

/ > Users > wcwe > Documents > MATLAB
Command Window
>> im_rgb=double(im);
im_gray=im_rgb(:,:,1)* 0.2989+ im_rgb(:,:,2)* 0.5870+ im_rgb(:,:,3)* 0.1140; im_gray=uint8(im_gray);
figure, imshow(im_gray);
fx >> |
```