COMPUTER GRAPHICS

LAB

ISA 2

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ADMISSION NO.: 192019

CLASS: TYBCA

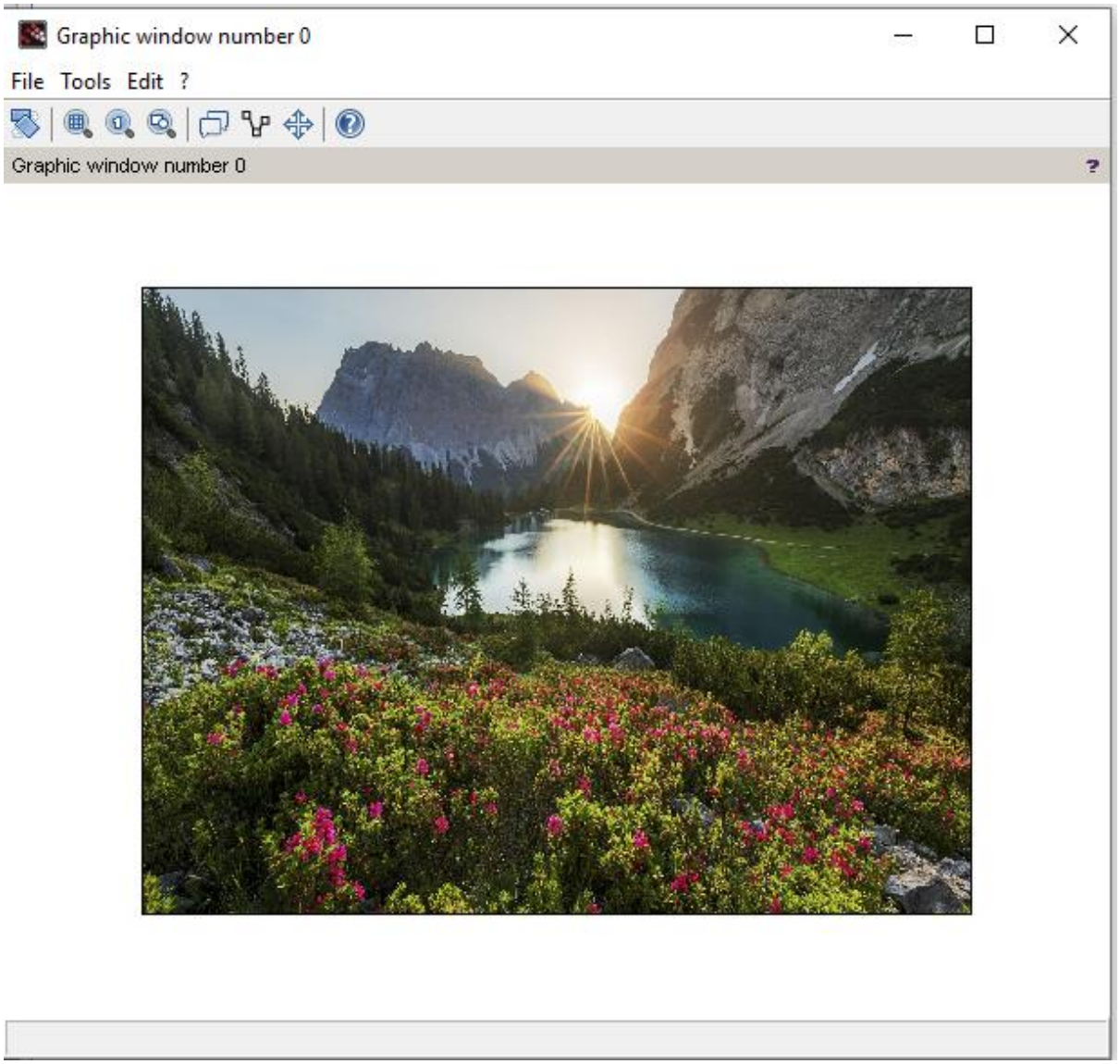
Q1. Write a program for image manipulation using Scilab.

a) Read a colored image.

```
a = imread('nature.jpg');

imshow(a)
```

Screenshot



b. Convert the colored image to grey scale image.

```
b = rgb2gray(a);
```

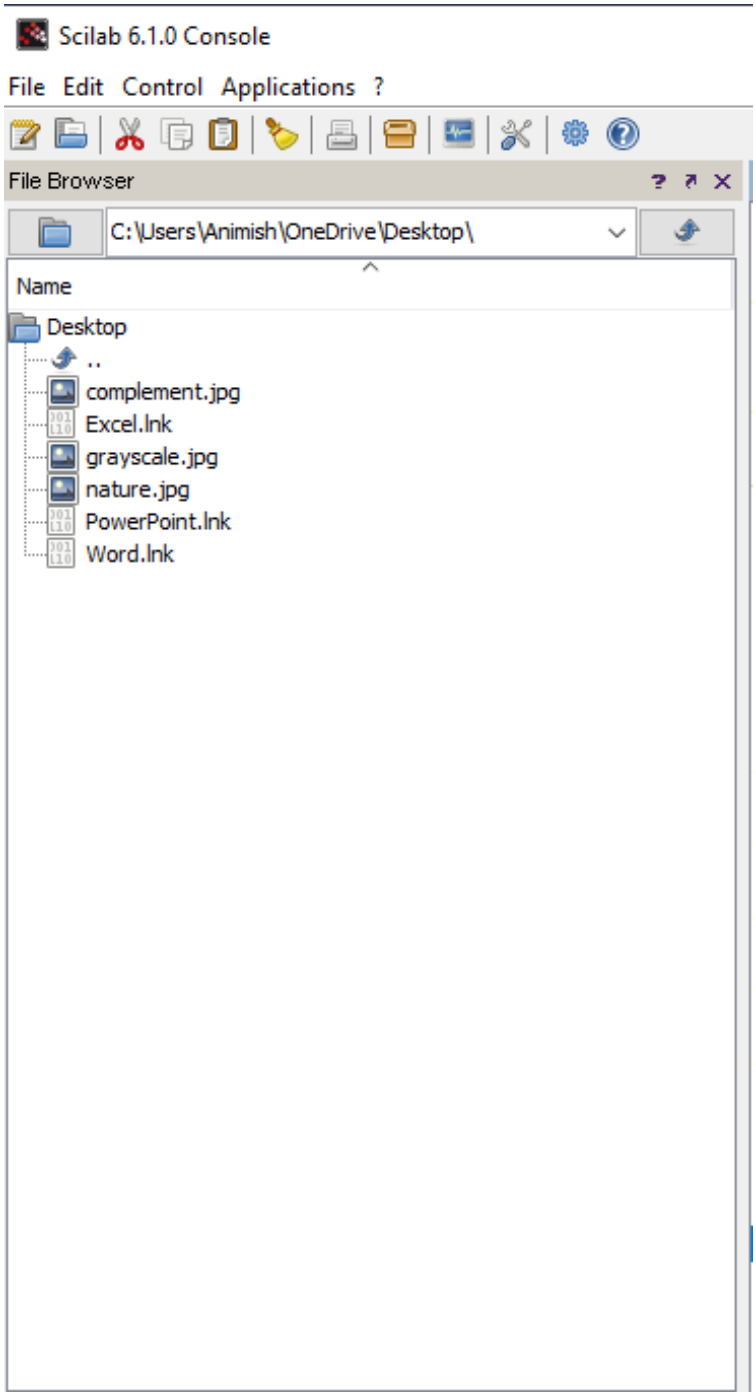
c. Generate complement of the colored image.

```
c = imcomplement(a);
```

d. Write both the images in the destination folder.

```
imwrite(b,'grayscale.jpg')
imwrite(c,'complement.jpg')
```

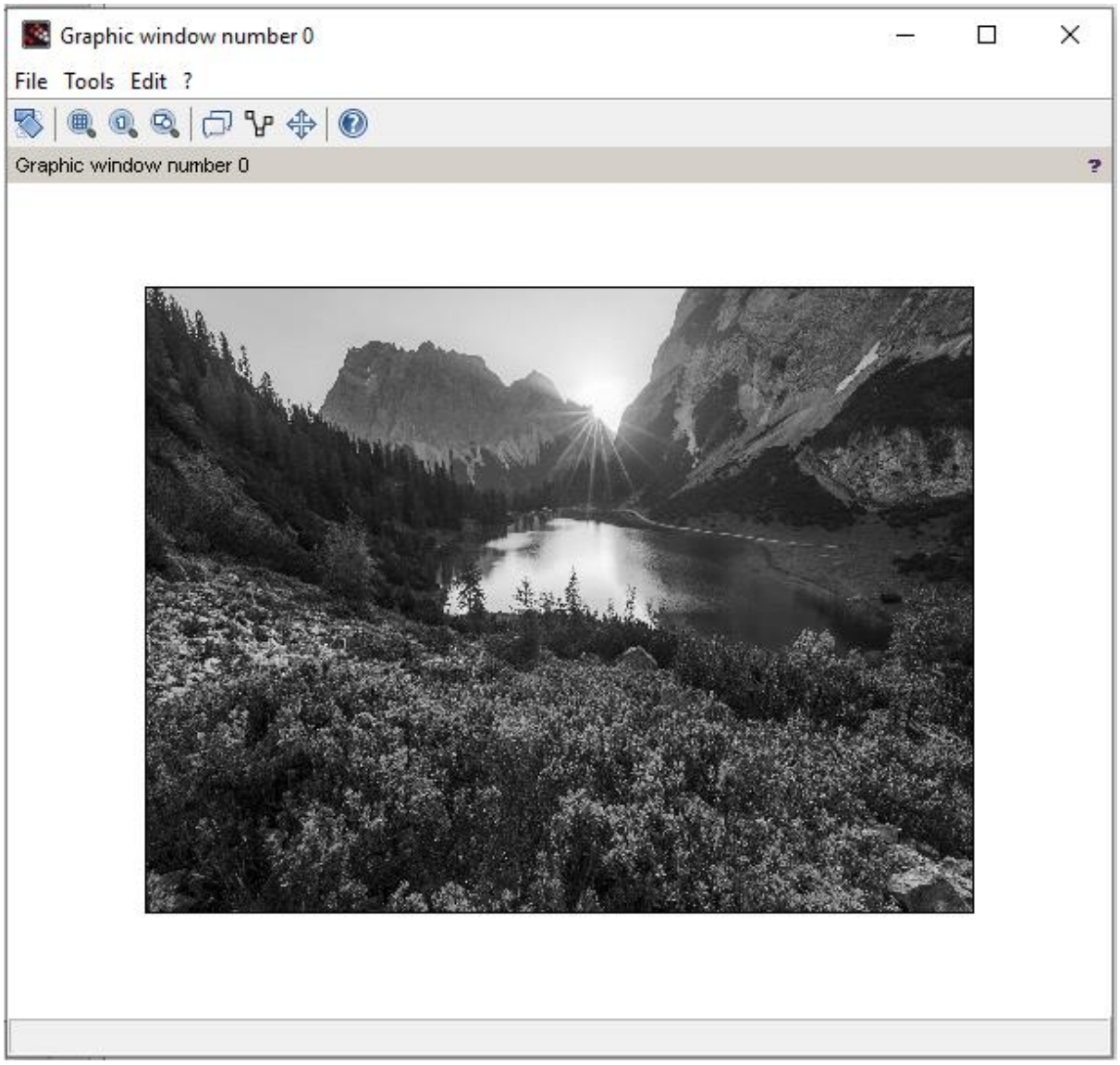
Screenshot



e. Display both the images.

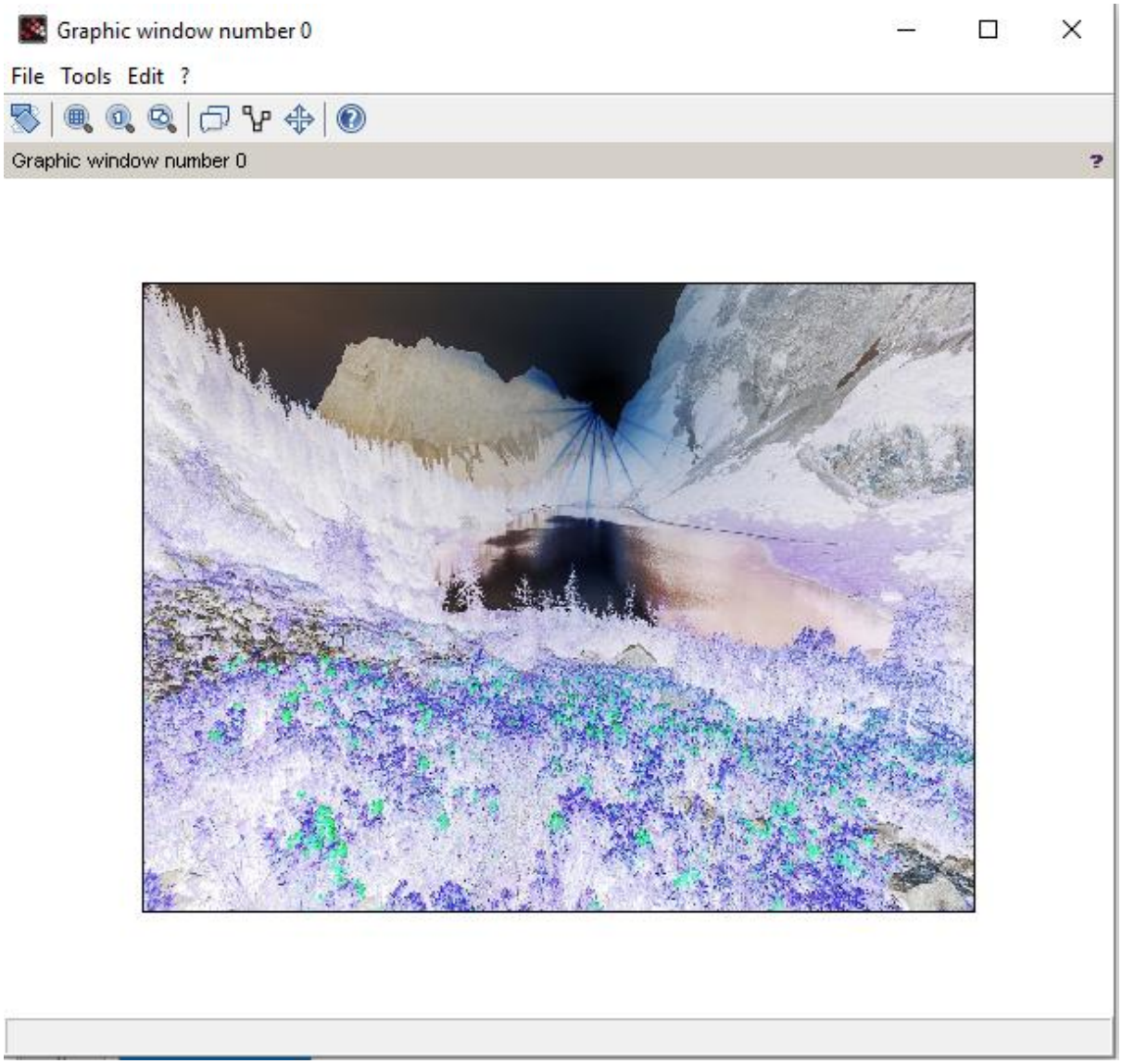
--> imshow(b)

Screenshot

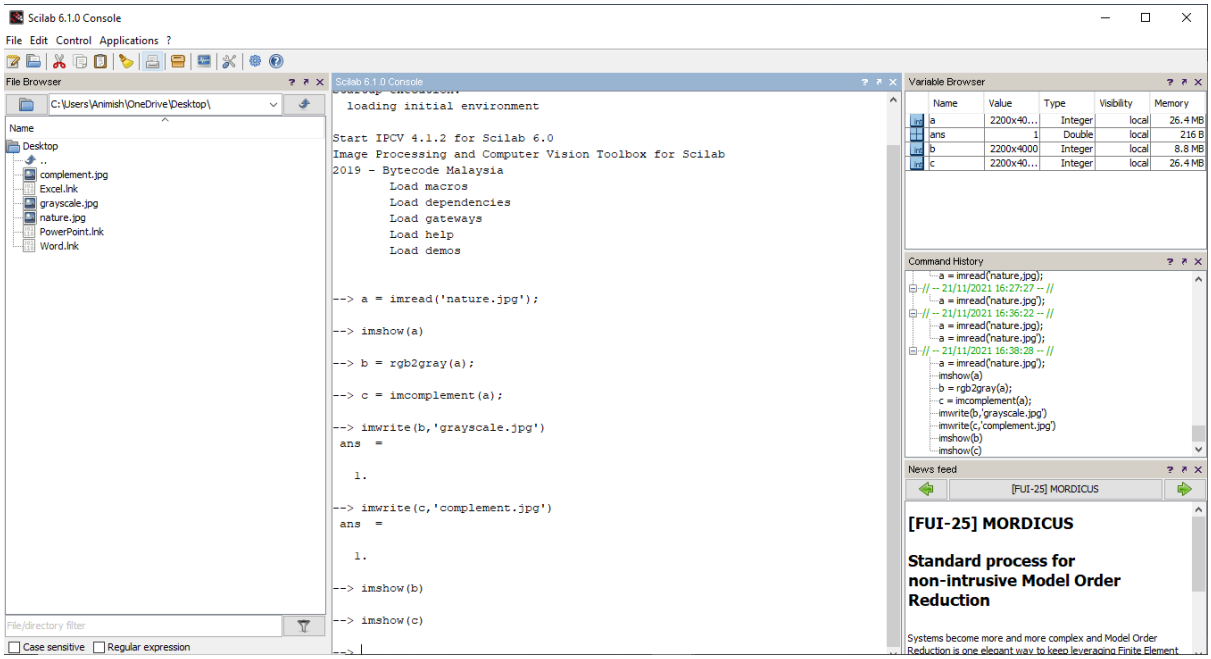

Graphic window number 0
File Tools Edit ?
Graphic window number 0

--> imshow(c)

Screenshot


Graphic window number 0
File Tools Edit ?
Graphic window number 0

Screenshot


Scilab 6.1.0 Console
File Edit Control Applications ?
File Browser
C:\Users\Animish\OneDrive\Desktop\
Name
Desktop
..
complement.jpg
Excel.lnk
grayscale.jpg
nature.jpg
PowerPoint.lnk
Word.lnk
File/directory filter
Case sensitive
Regular expression
Scilab 6.1.0 Console
loading initial environment
Start IPCV 4.1.2 for Scilab 6.0
Image Processing and Computer Vision Toolbox for Scilab
2019 - Bytecode Malaysia
Load macros
Load dependencies
Load gateways
Load help
Load demos
--> a = imread('nature.jpg');
--> imshow(a)
--> b = rgb2gray(a);
--> c = imcomplement(a);
--> imwrite(b,'grayscale.jpg')
ans =
1.
--> imwrite(c,'complement.jpg')
ans =
1.
--> imshow(b)
--> imshow(c)
Variable Browser
Name Value Type Visibility Memory
a 2200x40... Integer local 26.4 MB
ans 1 Double local 216 B
b 2200x4000 Integer local 8.8 MB
c 2200x40... Integer local 26.4 MB
Command History
a = imread('nature.jpg');
// -- 21/11/2021 16:27:27 -- //
a = imread('nature.jpg');
// -- 21/11/2021 16:36:22 -- //
a = imread('nature.jpg');
a = imread('nature.jpg');
// -- 21/11/2021 16:38:28 -- //
a = imread('nature.jpg');
imshow(a)
b = rgb2gray(a);
c = imcomplement(a);
imwrite(b,'grayscale.jpg')
imwrite(c,'complement.jpg')
imshow(b)
imshow(c)
News feed
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Standard process for non-intrusive Model Order Reduction
Systems become more and more complex and Model Order Reduction is one elegant way to keep leveraging Finite Element

Scilab Notes