



COURSE NAME	DIGITAL IMAGE PROCESSING
COURSE CODE	DBP 30203
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TITLE	LAB SESSION 2: IMAGE ENHANCEMENT
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LAB SESSION 2 – ENHANCEMENT

LABWORK 2.1 – Negative image

Command Window

```
>> I = imread("Cat.jpg");  
>> J = imcomplement(I);  
>> figure, imshow(J);  
>> |
```



ORIGINAL IMAGE



OUTPUT NEGATIVE IMAGE

LABWORK 2.2 Log Transformation

Command Window

```
>> i=imread("building.png");  
>> j=im2double(i);  
>> output1=2*log(1+j);  
>> output2=3*log(1+j);  
>> output3=5*log(1+j);  
>> figure, imshow(output1);  
>> figure, imshow(output2);  
>> figure, imshow(output3);  
>>
```



ORIGINAL IMAGE



OUTPUT IMAGE USING SCALING
CONTANT, $c = 2$



OUTPUT IMAGE USING SCALING
CONTANT, $c = 3$



OUTPUT IMAGE USING SCALING
CONTANT, $c = 5$

LABWORK 2.3 – Thresholding

Command Window

```
>> i = imread("building.png");  
>> j = im2bw(i, 102/255);  
>> figure, imshow(j);  
>>
```



ORIGINAL IMAGE



OUTPUT BINARY IMAGE

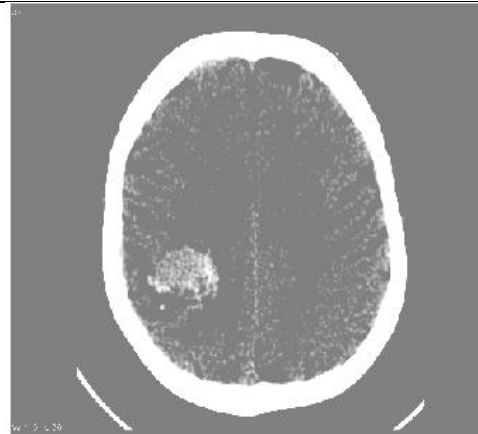
LABWORK 2.4 – Gray level slicing and contrast stretching

Gray level slicing

```
Command Window
>> i = imread("brain.jpeg");
>> j = imadjust(i,[135/255 200/255],[0.5 1]);
>> imshow(j);
>> |
```



ORIGINAL IMAGE



OUTPUT IMAGE

Contrast stretching

```
Command Window
>> i = imread("waterlily.jpg");
>> j = imadjust(i,[5/255 70/255],[0 1]);
>> imshow(j);
>>
```



ORIGINAL IMAGE



OUTPUT IMAGE