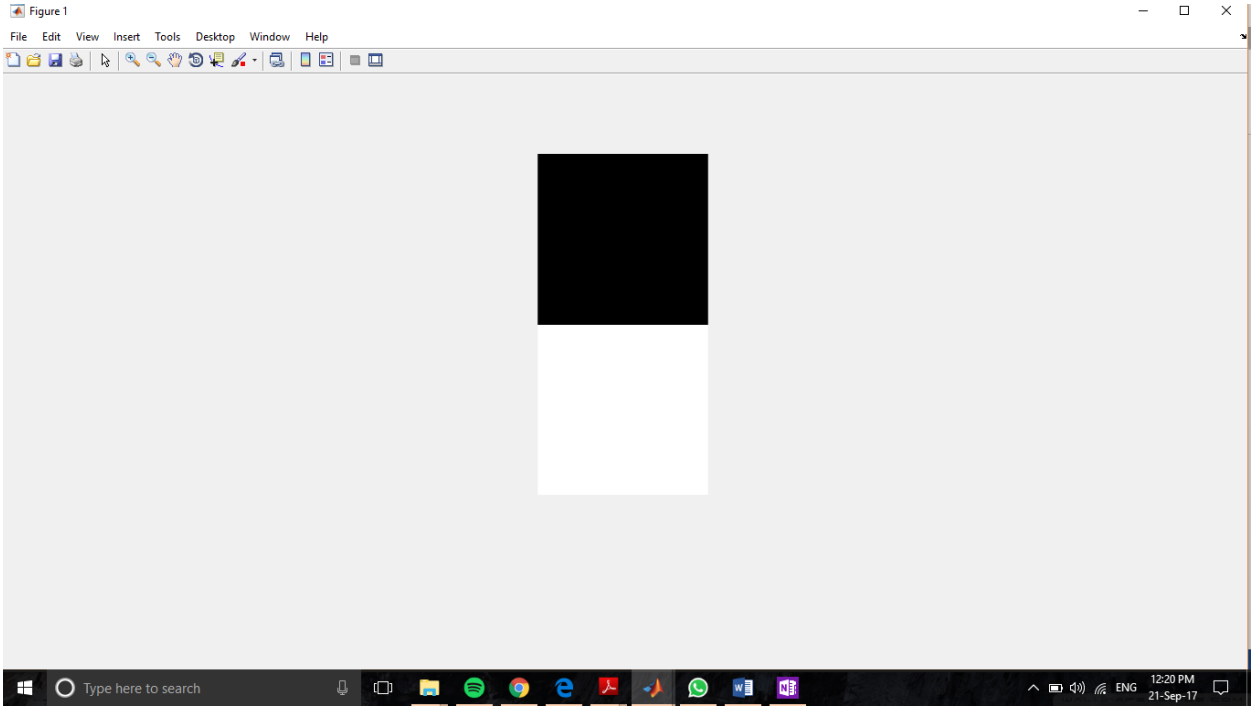
Experiment-1

Q1.

```
clc;
clear all;
close all;
A = zeros(64, 128);         % 64-by-64 matrix of black
B = ones(64,128)*255;             % 64-by-64 matrix of white

C = [A; B];                % Vertically concatenate A and B
imshow(C);    %im2uint8 performs necessary scaling to recognize data as the
valid image data
```

Simulation Results:



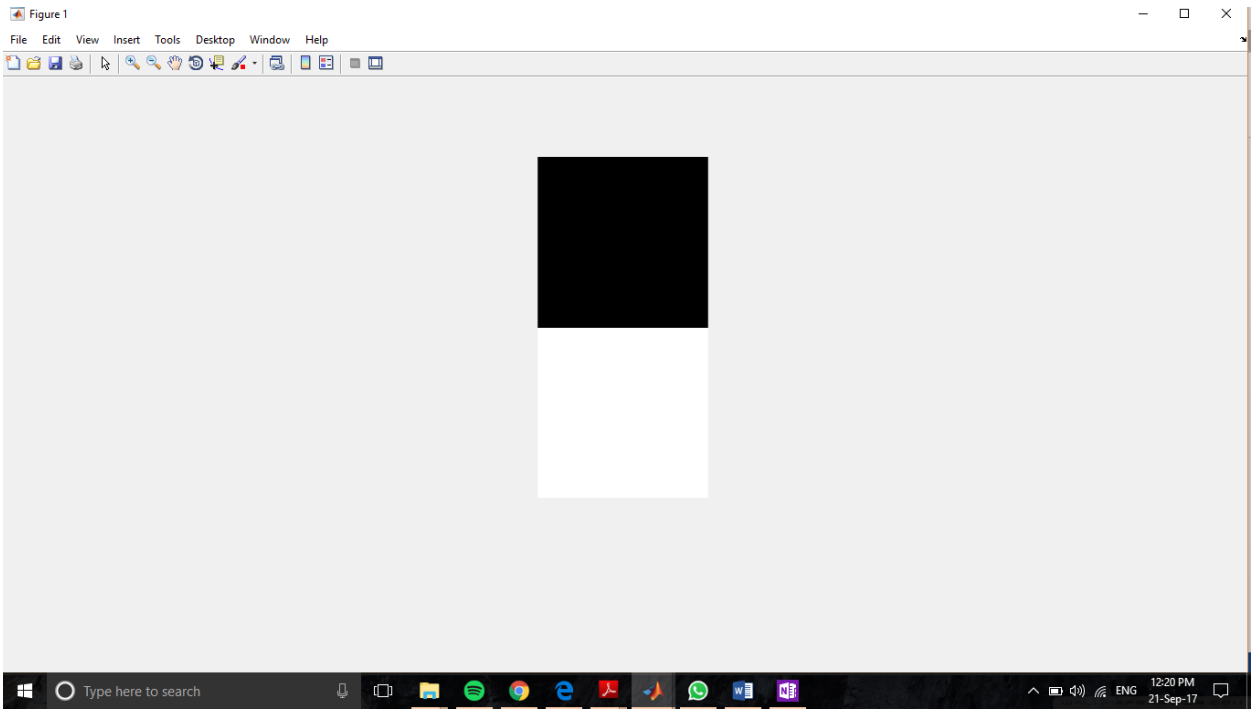
Q2.

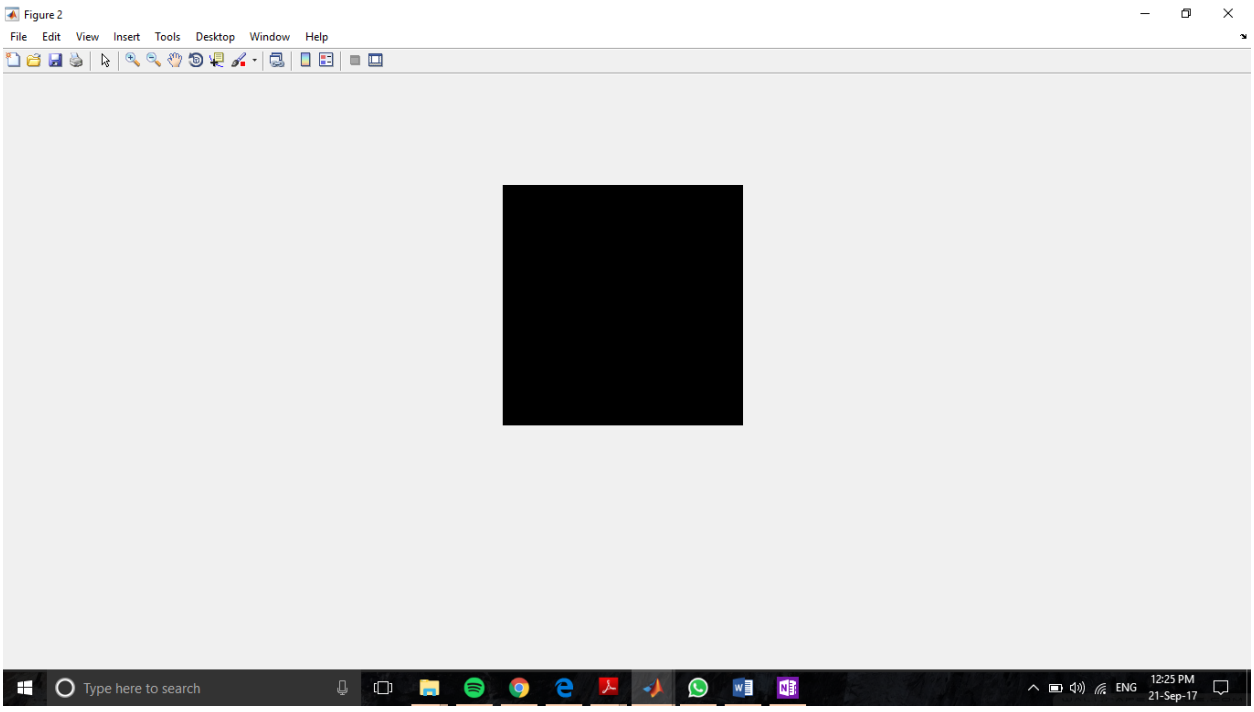
```
clc;
clear all;
close all;
A = zeros(64, 128);         % 64-by-64 matrix of black
B = ones(64,128)*255;             % 64-by-64 matrix of white
im = [A; B];                % Vertically concatenate A and B
figure
imshow(im);       %im2uint8 performs necessary scaling to recognize data as
the valid image data
```

```
im2 = imcrop(im,[0,0,128,64]);    %imcrop(image,[xmin,ymin,width,height](four element vector or a rectangular window)

figure
imshow(im2);
```

Simulation Results:

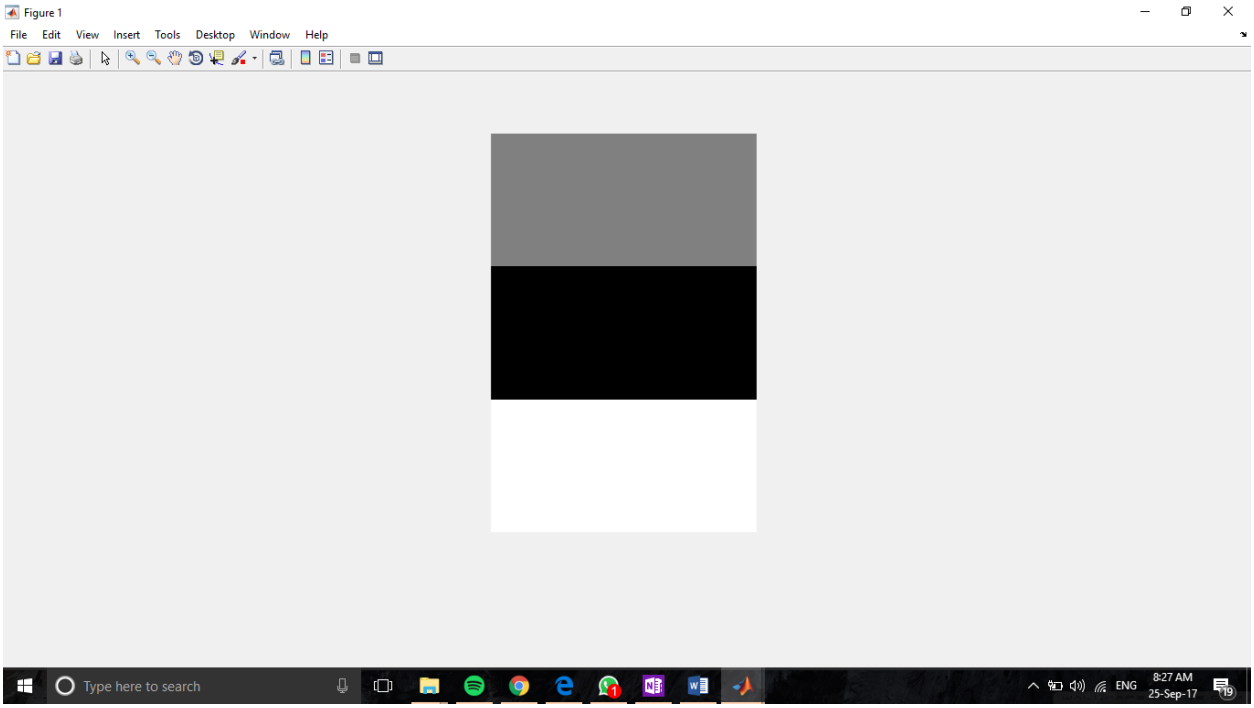




Q3

```
clc;
clear all;
close all;
A = zeros(64, 128);         % 64-by-64 matrix of black
B = ones(64, 128)*255;              % 64-by-64 matrix of white

im = [A; B];                % Vertically concatenate A and B
figure
imshow(im);       %im2uint8 performs necessary scaling to recognize data as
the valid image data
P = ones(64,128)*128;  % 64-by-128 matrix of grey
R = uint8(P);           %change from double to uint 8
im2 = [R;im];
figure
imshow(im2);
```



Q4.

```
clc;
clear all;
close all;
im=logical(zeros(256,256));
im(128,128)=1;  %make the centre pixel white
figure
imshow(im);
```

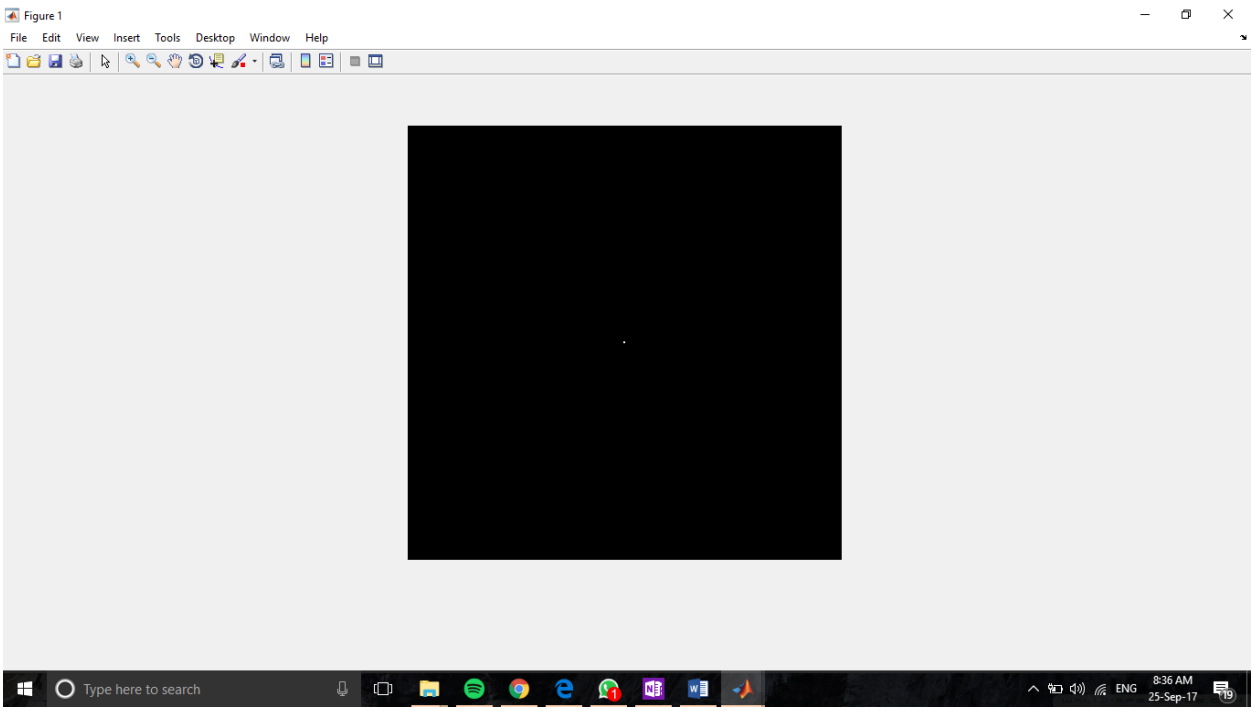


Figure 1
File Edit View Insert Tools Desktop Window Help
Type here to search
ENG
8:36 AM
25-Sep-17