

1) WhatsApp x MATLAB x +

matlab.mathworks.com

HOME PLOTS APPS FIGURE FORMAT TOOLS Search (Ctrl+Shift+Space) Swetha

Save As Show Code

FILE

MATLAB Drive

Files

- angry.jpg
- bit_com_2.tif
- blended imag.m
- blendedimag.m
- cameraman.tif
- columns.tif
- inverted.m
- matali.m
- moon.tif
- mri.tif
- rotated.m
- scaled.m
- sheared.m

Workspace

Name	Value
addition...	537x358 ui...

COMMAND WINDOW

```
1 image1 = imread('moon.tif');
2 image2 = imread('cameraman.tif');
3 size1=size(image1);
4 size2=size(image2);
5 image2=imresize(image2,size1);
6 additionresult = image1 + image2;
7 subtractionresult = image1 - image2;
8 scalar = 2;
9 mulresult = image1 * scalar;
10 divresult = image1 / scalar;
11 figure;
12 subplot(3, 2, 1);
13 imshow(image1);
14 title('image1');
15 subplot(3, 2, 2);
16 imshow(image2);
17 title('image2');
18 subplot(3, 2, 3);
19 imshow(additionresult);
20 title('additionresult');
21 subplot(3, 2, 4);
22 imshow(subtractionresult);
23 title('subtractionresult');
24 subplot(3, 2, 5);
```

Figure 1 x Figure 2 x Figure 3 x Figure 4 x Figure 5 x +

image1 image2

additionresult subtractionresult

mulresult divresult

Activate Windows
Go to Settings to activate Windows.

Type here to search

USD/INR -0.12%

19:01
21-07-2023

Windows taskbar shows (1) WhatsApp, MATLAB, and a browser window at matlab.mathworks.com.

The MATLAB interface includes a ribbon with tabs: HOME, PLOTS, APPS, EDITOR, PUBLISH, FILE VERSIONS, and VIEW. The EDITOR tab is active, showing a script named `blendedimag.m` with the following code:

```
1 scalar = 2;  
2 mulresult = image1 * scalar;  
3 divresult = image1 / scalar;  
4 figure;  
5 subplot(3, 2, 1);  
6 imshow(image1);  
7 title('image1');  
8 subplot(3, 2, 2);  
9 imshow(image2);  
10 title('image2');  
11 subplot(3, 2, 3);  
12 imshow(additionresult);  
13 title('additionresult');  
14 subplot(3, 2, 4);  
15 imshow(subtractionresult);  
16 title('subtractionresult');  
17 subplot(3, 2, 5);  
18 imshow(mulresult);  
19 title('mulresult');  
20 subplot(3, 2, 6);  
21 imshow(divresult);  
22 title('divresult');
```

The Workspace pane on the left shows variables: `addition...` (537x358 ui) and `image1` (537x358 ui).

The Figure window on the right displays six subplots arranged in a 3x2 grid:

- image1: A grayscale image of a crescent moon.
- image2: A grayscale image of a person standing on a tripod.
- additionresult: A grayscale image showing the element-wise addition of image1 and image2.
- subtractionresult: A grayscale image showing the element-wise subtraction of image2 from image1.
- mulresult: A grayscale image showing the element-wise multiplication of image1 by the scalar value 2.
- divresult: A grayscale image showing the element-wise division of image1 by the scalar value 2.

An "Activate Windows" watermark is visible in the bottom right corner of the Figure window.

The Windows taskbar at the bottom shows the search bar, task view button, and several application icons. The system tray on the right displays the date and time: 19:01, 21-07-2023.

Windows taskbar: (1) WhatsApp, MATLAB

Browser: matlab.mathworks.com

MATLAB Interface:

- Menu: HOME, PLOTS, APPS, FIGURE, FORMAT, TOOLS
- Search: Search (Ctrl+Shift+Space)
- Figure Tools: Title, X-Label, Y-Label, Z-Label, Legend, Colorbar, Grid, X-Grid, Y-Grid, Z-Grid
- FILE: Save As, Show Code
- Workspace: Files, Workspace
- Command Window: MATLAB Drive/blendedimag.m

```
1 image1 = imread('moon.tif');
2 image2 = imread('cameraman.tif');
3
4 image2 = imresize(image2, size(image1));
5 blendingRatio = 0.5;
6 blendingimage = blendingRatio * image1 + (1-blendingRatio) * image2;
7 figure;
8
9 subplot(2,2,1);
10 imshow(image1);
11 title("image1");
12
13 subplot(2,2,2);
14 imshow(image2);
15 title("image2");
16
17 subplot(2,2,3);
18 imshow(blendingimage);
19 title("Blended image");
20
```

Figure 1: image1 (Moon image)

Figure 2: image2 (Cameraman image)

Figure 3: Blended image

Windows taskbar: 33°C Partly cloudy, 19:00, 21-07-2023

MATLAB

matlab.mathworks.com

HOME PLOTS APPS EDITOR PUBLISH FILE VERSIONS VIEW

New Open Save Go To Find Refactor Code Issues Run Section Section Break Run and Advance Run Step Stop

FILE NAVIGATE CODE ANALYZE SECTION RUN

MATLAB Drive

Files

- angry.jpg
- bit_com_2.tif
- blended_imag.m
- blendedimag.m
- cameraman.tif
- columns.tif
- inverted.m
- matali.m
- moon.tif
- mri.tif
- rotated.m
- scaled.m
- sheared.m

Workspace

Name	Value
image	586x612x3

COMMAND WINDOW

```
1 image = imread("smile.jpg");
2 invertedimage = imcomplement(image);
3
4 figure;
5 subplot(1,2,1);
6 imshow(image);
7 title("image");
8 subplot(1,2,2);
9 imshow(invertedimage);
10 title("inverted image");
11
```

Figure 1

image

inverted image

Activate Windows
Go to Settings to activate Windows.

31°C Windy 13:53 22-07-2023