```
function [] = filter_signals()
```

FILTER_SIGNALS

Summary of this function goes here.

- Syntax

[OUTPUTARGS] = FILTER_SIGNALS(INPUTARGS)

- Input

-- INPUTARGS -

- Output

-- OUTPUTARGS -

- Examples:

Provide sample usage code here

- See also:

List related files here

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- Email: dleliuhin@mail.ru
- Date: 04/04/2019 22:55:53
- Version: 1.0 $
- Requirements: PCWIN64, MatLab R2016a
- Warning:

1. Warnings list.

- TODO:

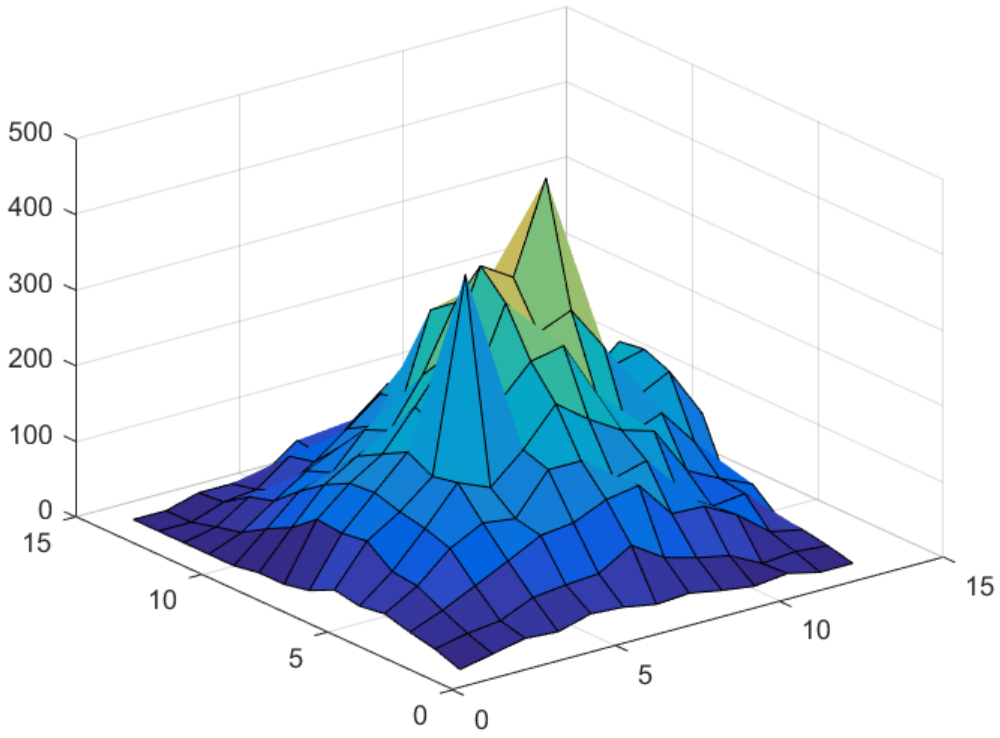
1. TODO list.

Code

```
clc;
clear all;
close all;
```

```
y.rows = 14;
y.cols = 13;

file_name = '../results/rash3.xls';

mat_noise = zeros(y.rows, y.cols);

mat_anis_filt = zeros(y.rows, y.cols);
mat_diff_anis = zeros(y.rows, y.cols);

mat_stat_filt = zeros(y.rows, y.cols);
mat_diff_stat = zeros(y.rows, y.cols);

xls_range_noise = 'A4:M17';

xls_range_1 = 'A21:M34';
xls_range_2 = 'A38:M51';

xls_range_3 = 'A76:M89';
xls_range_4 = 'A93:M106';

mat_noise = xlsread(file_name, xls_range_noise);

mat_anis_filt = xlsread(file_name, xls_range_1);
mat_diff_anis = xlsread(file_name, xls_range_2);

mat_stat_filt = xlsread(file_name, xls_range_3);
mat_diff_stat = xlsread(file_name, xls_range_4);

%=========================================================================

figure;
title('Noised signal 2D.', 'FontSize', 18);
view(2);
surf(mat_noise);
snapnow;
saveas(gcf, '../results/2D-view-noised', 'jpg');

figure;
title('Noised signal.', 'FontSize', 18);
surf(mat_noise)
saveas(gcf, '../results/noised', 'jpg');

%=========================================================================

%=========================================================================

figure;
title('Anisotropic filtered signal 2D.', 'FontSize', 18);
surf(mat_anis_filt);
view(2);
snapnow;
saveas(gcf, '../results/2D-view-anisotr-filter', 'jpg');
```

```
figure;
title('Anisotropic filtered signal.', 'FontSize', 18);
surf(mat_anis_filt)
saveas(gcf, '../results/anisotr-filter', 'jpg');

%=========================================================================

figure;
title('Anisotropic difference 2D.', 'FontSize', 18);
surf(mat_diff_anis);
view(2);
snapnow;
saveas(gcf, '../results/2D-view-anisotr-diff', 'jpg');

figure;
title('Anisotropic difference.', 'FontSize', 18);
surf(mat_diff_anis)
saveas(gcf, '../results/anisotr-diff', 'jpg');

%=========================================================================

%=========================================================================

figure;
title('Statistic filter 2D.', 'FontSize', 18);
surf(mat_stat_filt);
view(2);
snapnow;
saveas(gcf, '../results/2D-view-stat-filter', 'jpg');

figure;
title('Statistic filter.', 'FontSize', 18);
surf(mat_stat_filt)
saveas(gcf, '../results/stat-filter', 'jpg');

%=========================================================================

figure;
title('Statistic difference 2D.', 'FontSize', 18);
surf(mat_diff_stat);
view(2);
snapnow;
saveas(gcf, '../results/2D-view-stat-diff', 'jpg');

figure;
title('Statistic difference.', 'FontSize', 18);
surf(mat_diff_stat)
saveas(gcf, '../results/stat-diff', 'jpg');

%=========================================================================

save('../results/workspace.mat');

close all;
```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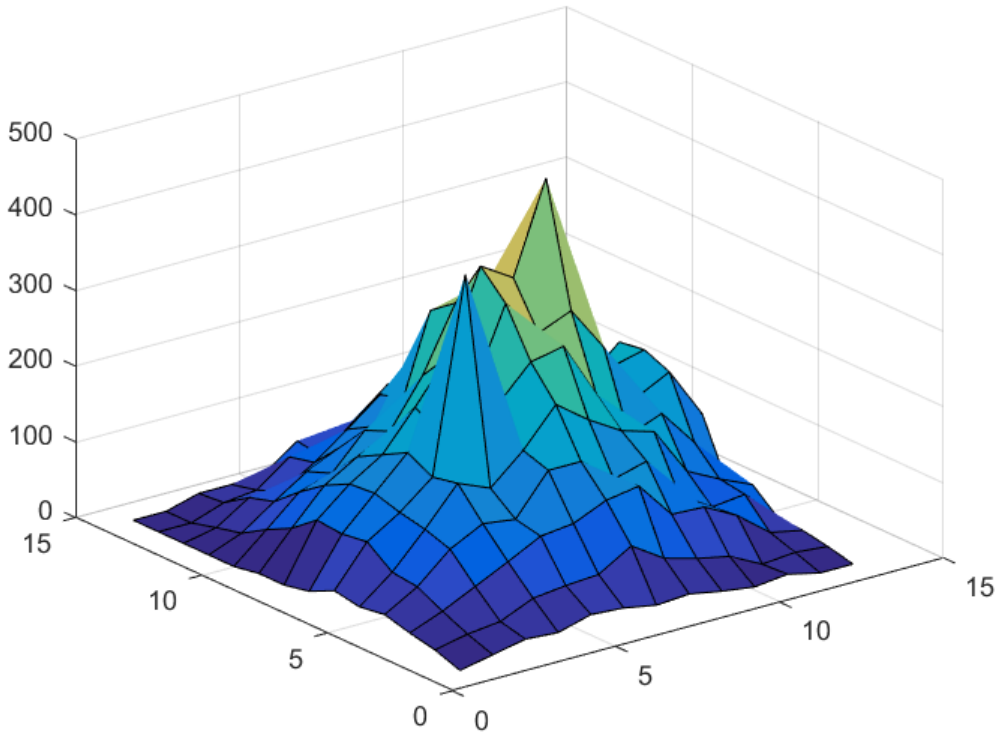
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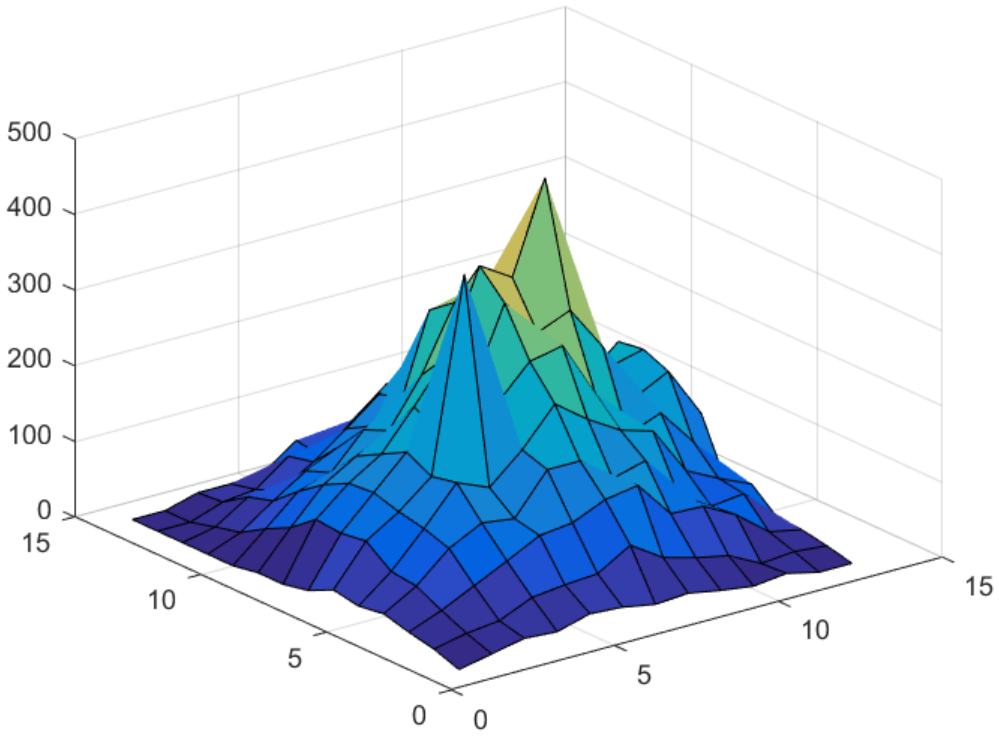
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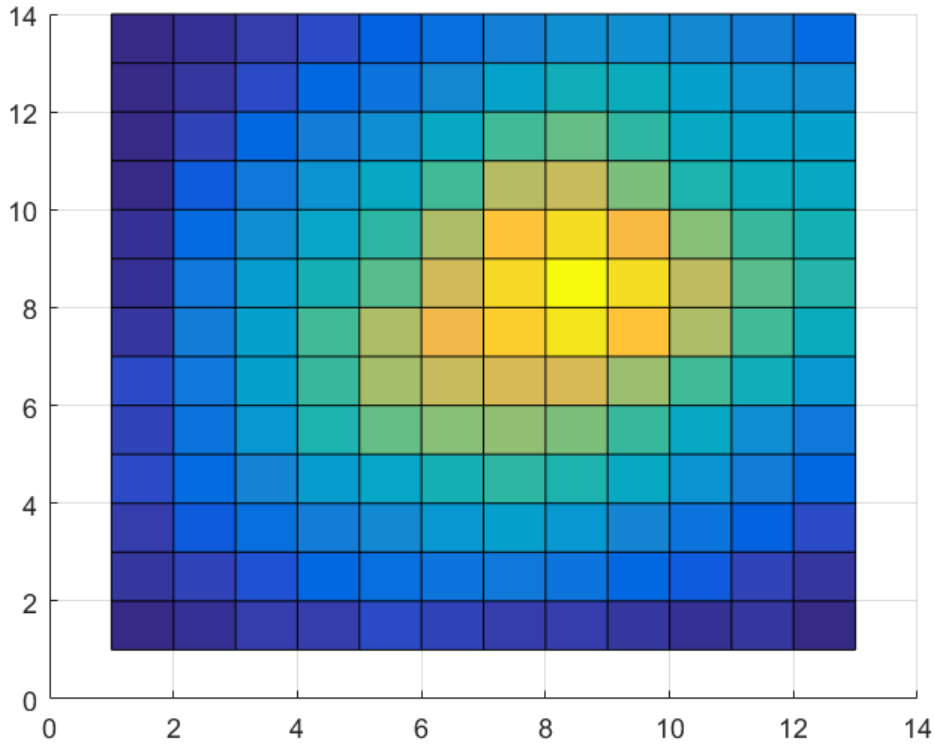
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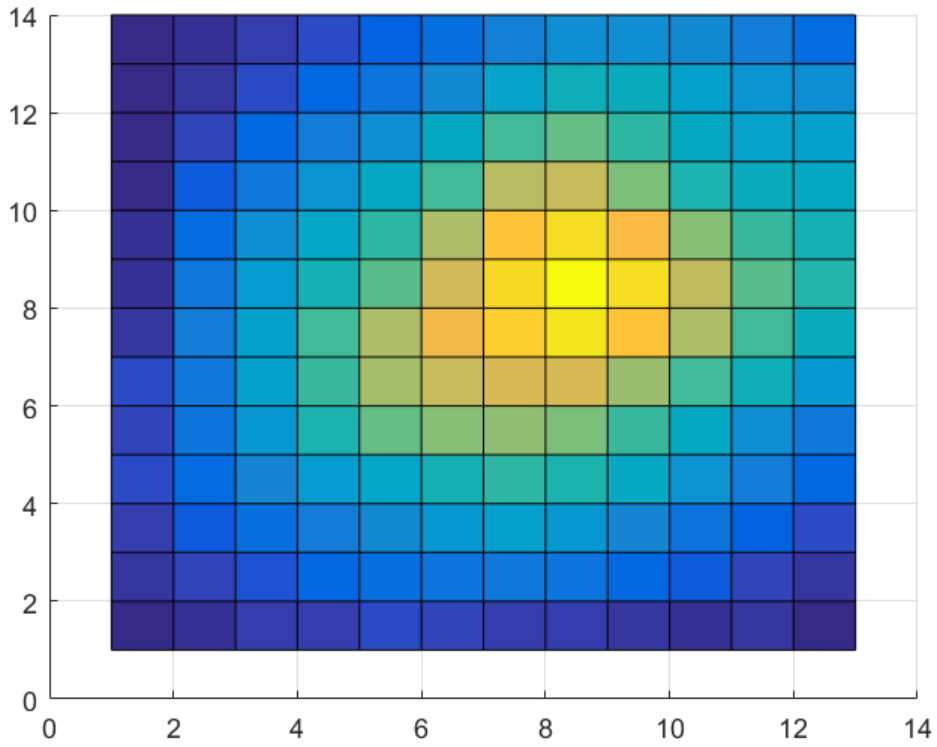
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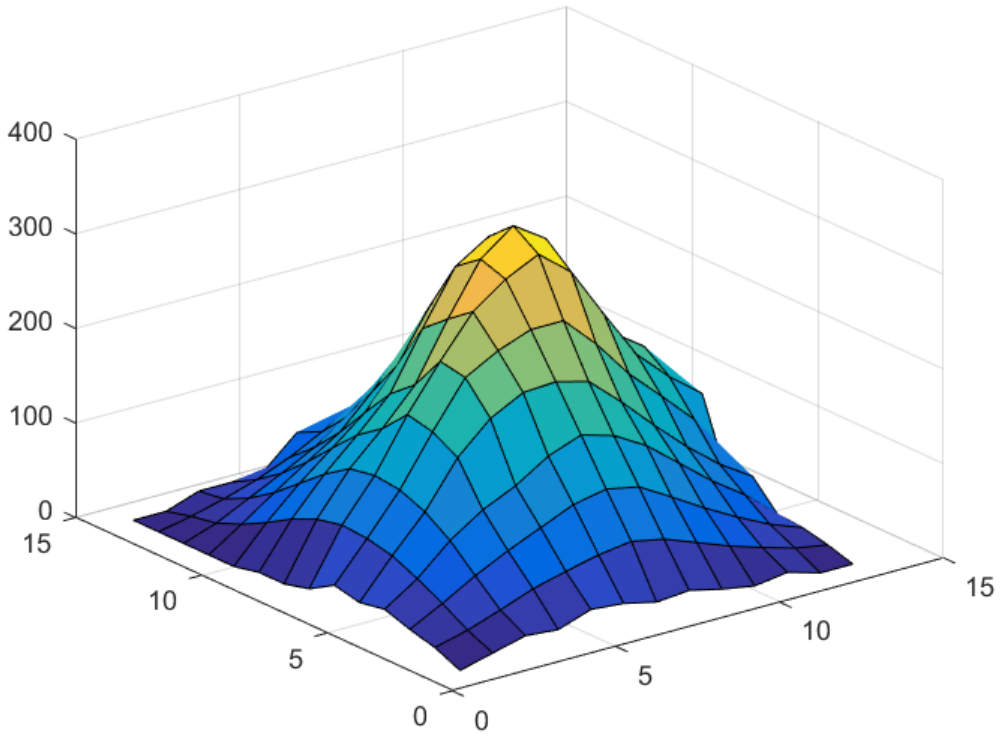
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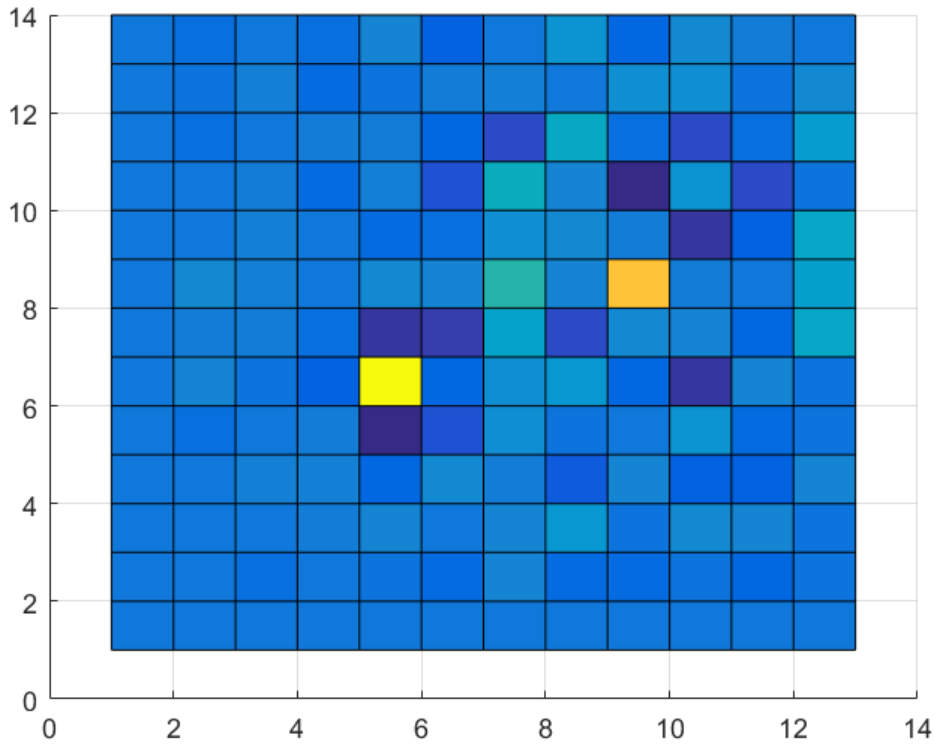
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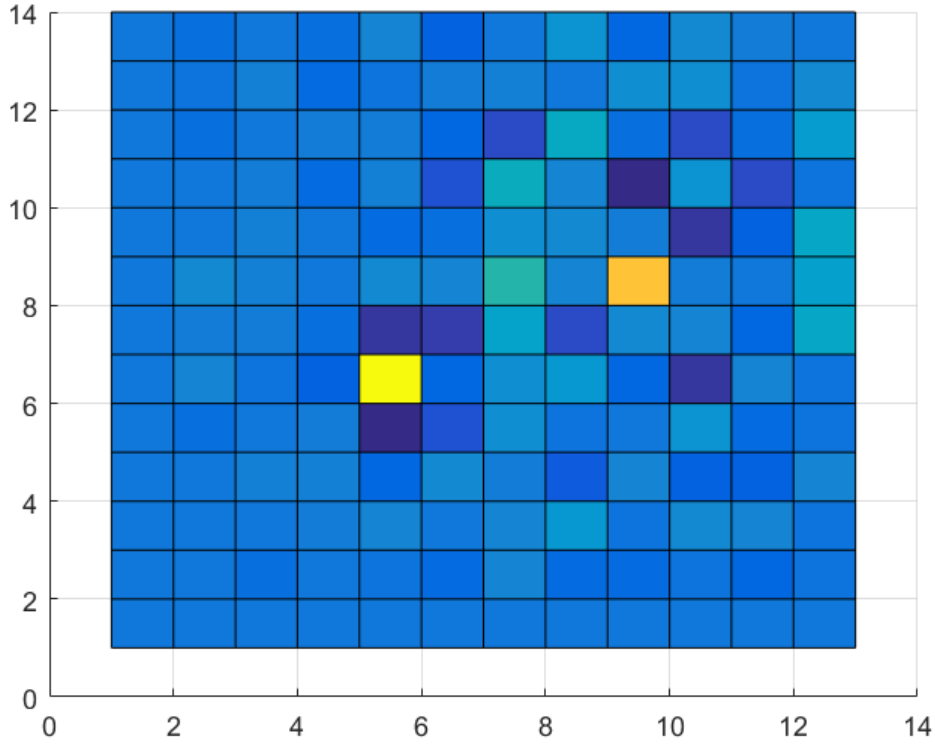
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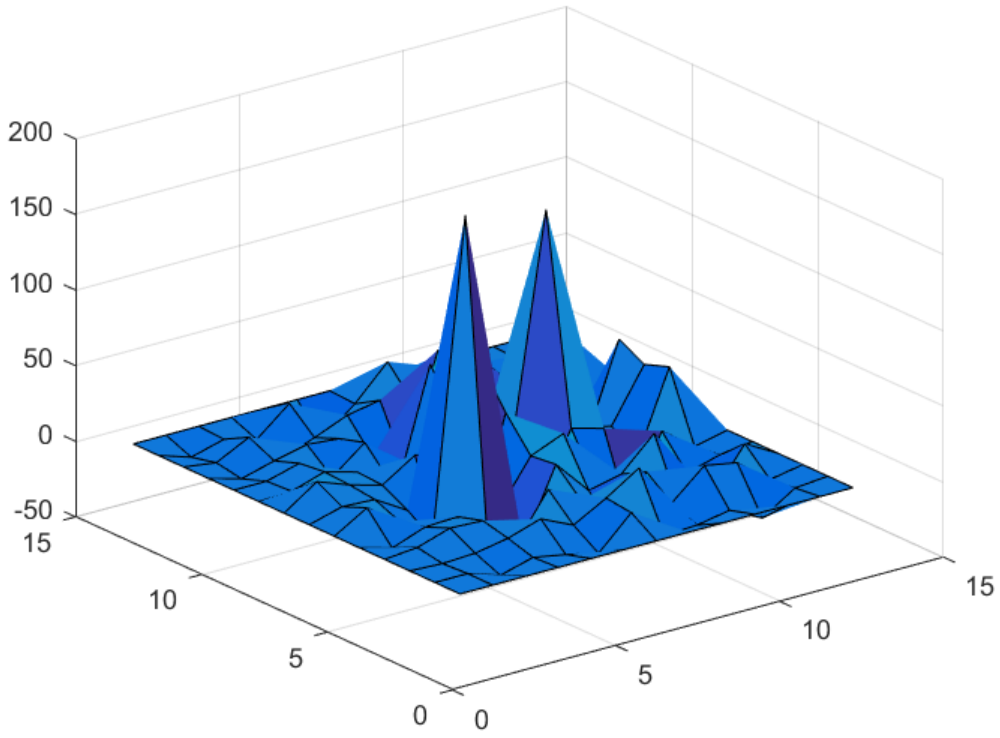
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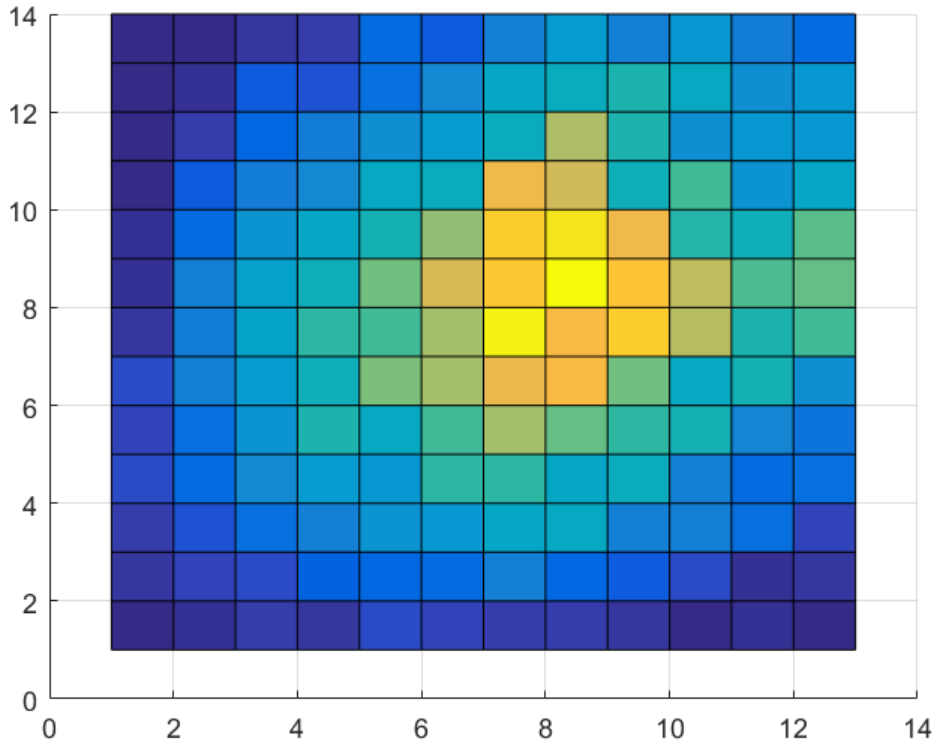
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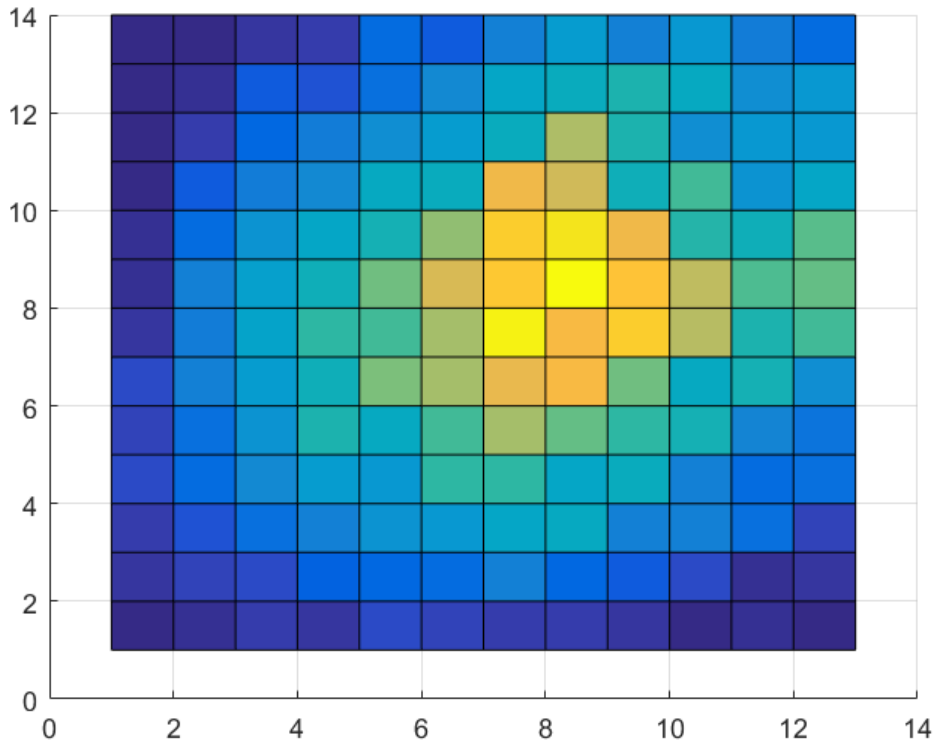
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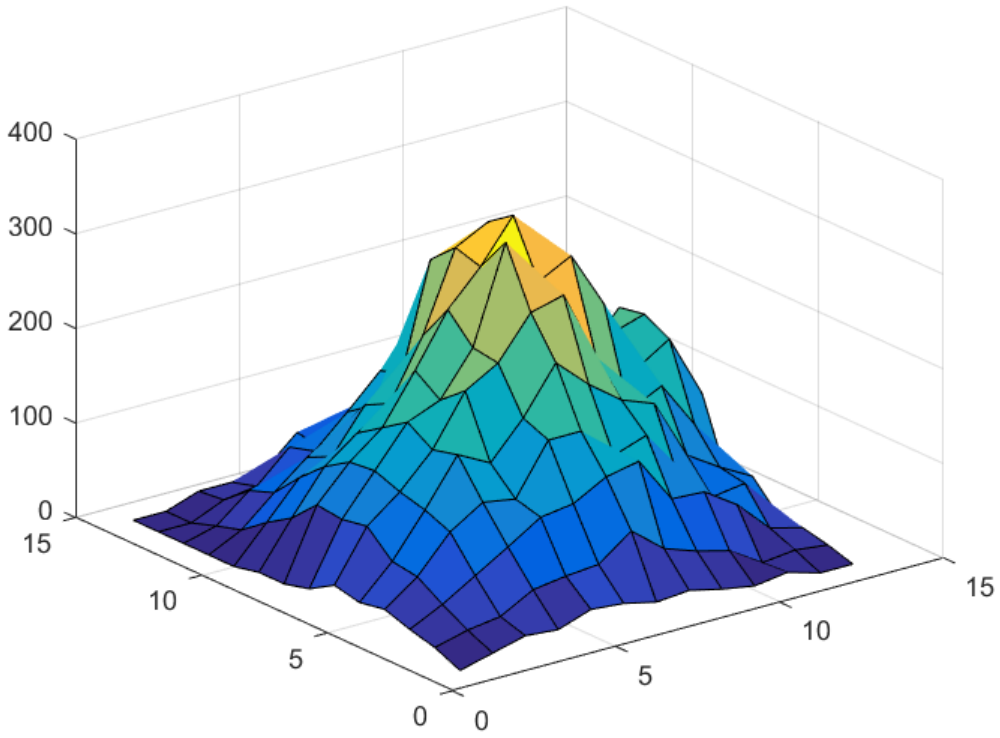
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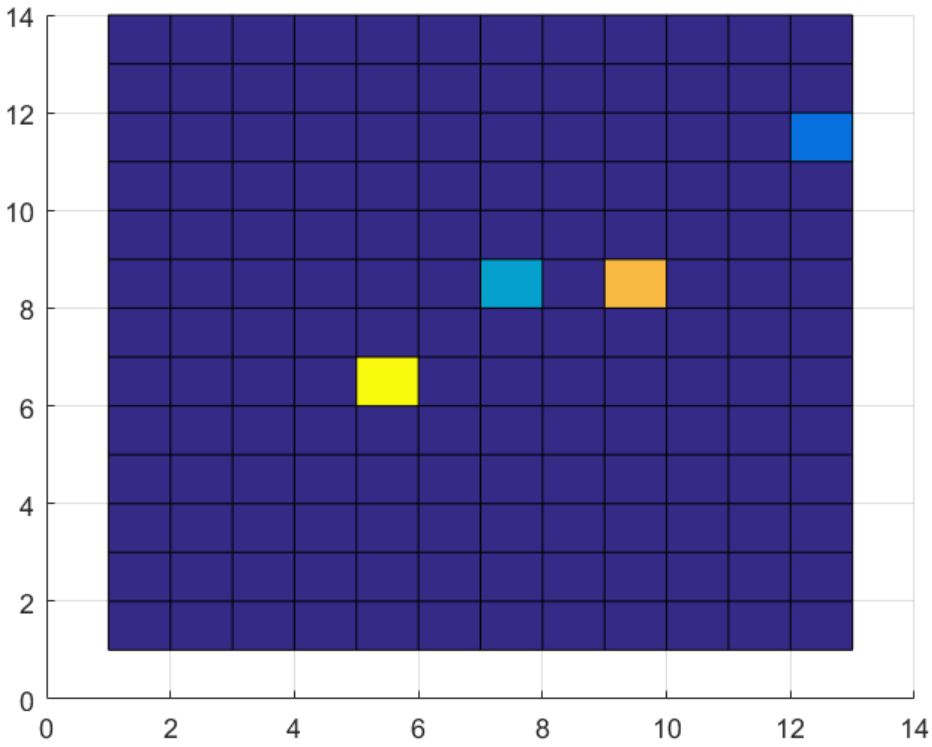


```
end
```

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