Лабораторна робота 3

Завдання 1

```
f1 = imread('kamen1.jpg');
I=im2double(rgb2gray(f1));
figure,imshow(I)
T=graythresh(I);
bw=I<T;
figure,imshow(bw)
title('original')
r=10;
se = strel('diamond', r);
bw1 = imerode(bw,se);
figure,imshow(bw1)
title('rezult')
```

Завдання 2

```
f1 = imread('kamen1.jpg');
I=im2double(rgb2gray(f1));
figure,imshow(I)
T=graythresh(I);
bw=I<T;
figure,imshow(bw)
title('original')
r=10;
se = strel('diamond', r);
bw1 = imdilate(bw,se);
figure,imshow(bw1)
title('rezult')
```

Завдання 3

```
I = imread('TextRoman.bmp');
figure,imshow(I)
I=im2double(I);
T=graythresh(I);
bw=I>T;
figure,imshow(bw)
title('original')
r=25;
se = strel('diamond', r);
bwr = imopen(bw, se);
figure,imshow(bwr)
title('razmikanie')
bwR = imreconstruct(bwr, bw);
figure,imshow(bwR)
title('Rezult')
```

Завдання 4.1

```matlab
R = imread('coffe.jpg');
I = im2double(rgb2gray(R));
T=graythresh(I);
BW1 = I<T;
figure,imshow(BW1)
BW2 = bwmorph(BW1,'erode',25);
figure,imshow(BW2)
title('erode')
BW3 = bwmorph(BW2,'thicken',inf);
figure,imshow(BW3)
title('thicken')
BW4 = BW1&BW3;
figure,imshow(BW4)
title('Rezult')
```

Завдання 4.2

```matlab
R = imread('agglut.jpg');
I = im2double(rgb2gray(R));
T=graythresh(I);
BW1 = I<T;
figure,imshow(BW1)
BW2 = bwmorph(BW1,'erode',5);
figure,imshow(BW2)
title('erode')
BW3 = bwmorph(BW2,'thicken',inf);
figure,imshow(BW3)
title('thicken')
BW4 = BW1&BW3;
figure,imshow(BW4)
title('Rezult')
```