

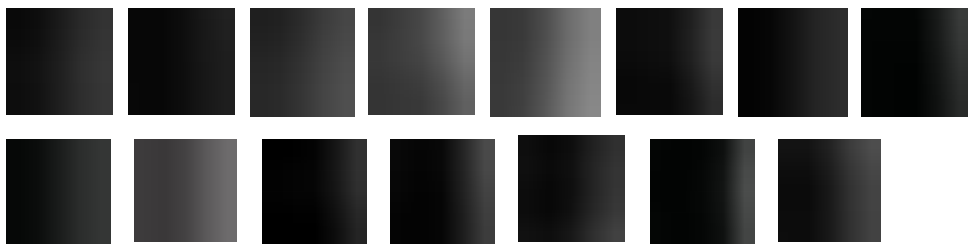
LAMPIRAN

LAMPIRAN 1 : Citra *training* dan citra *testing*

Citra *training*

a. Indikasi

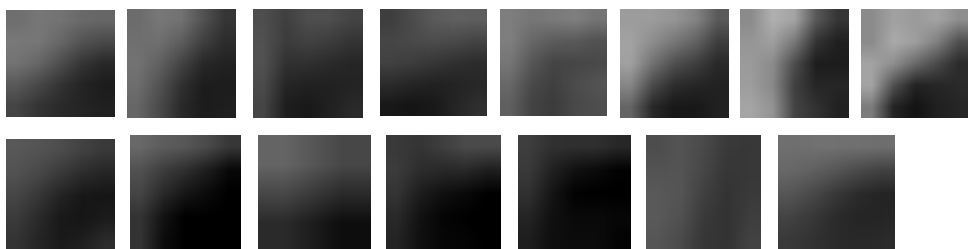
- Kategori 1



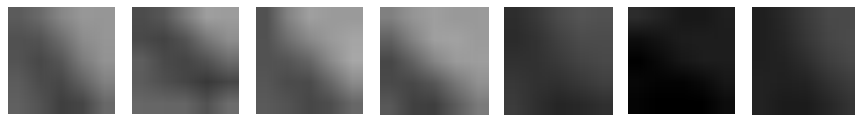
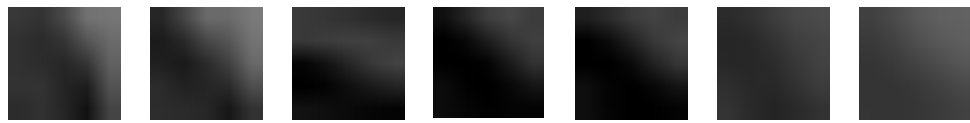
- Kategori 2



- Kategori 3



- Kategori 4



- Kategori 5



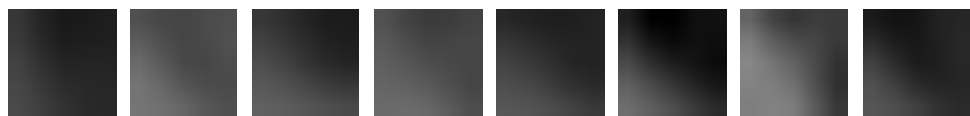
- Kategori 6



- Kategori 7



- Kategori 8

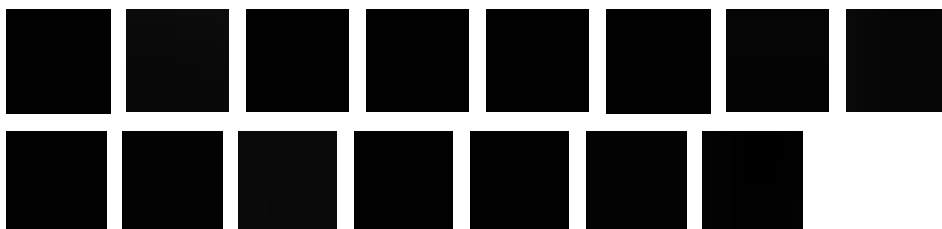




- Kategori 9



- Kategori 10

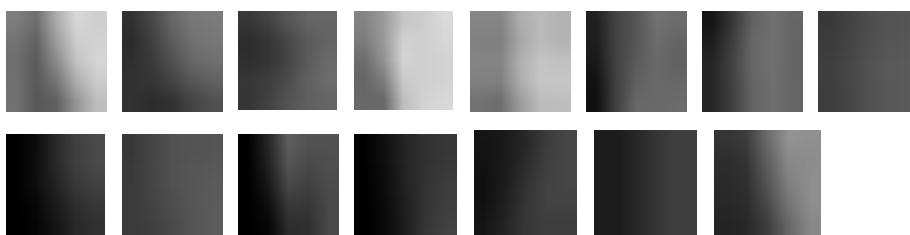


- Kategori 11

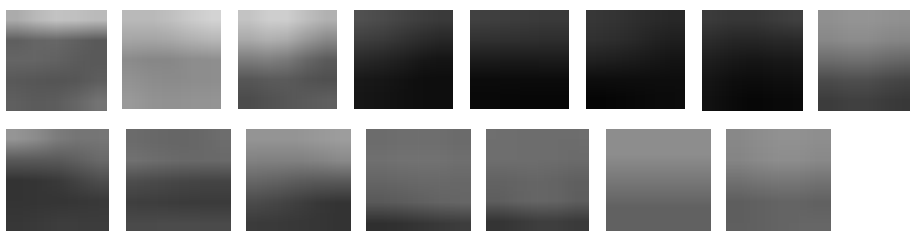


b. K1

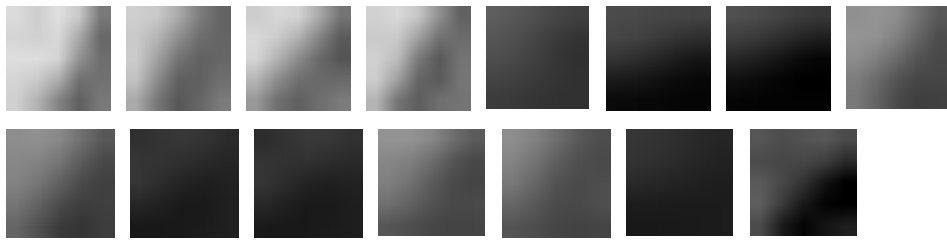
- Kategori 1



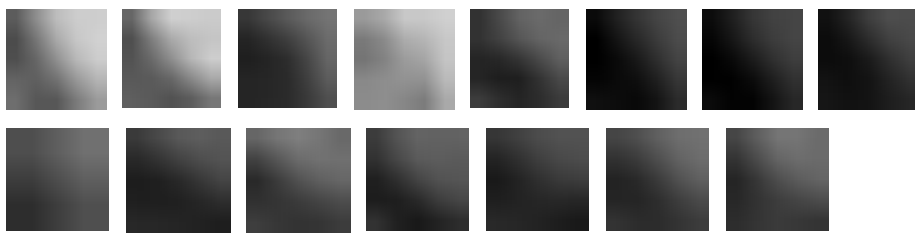
- Kategori 2



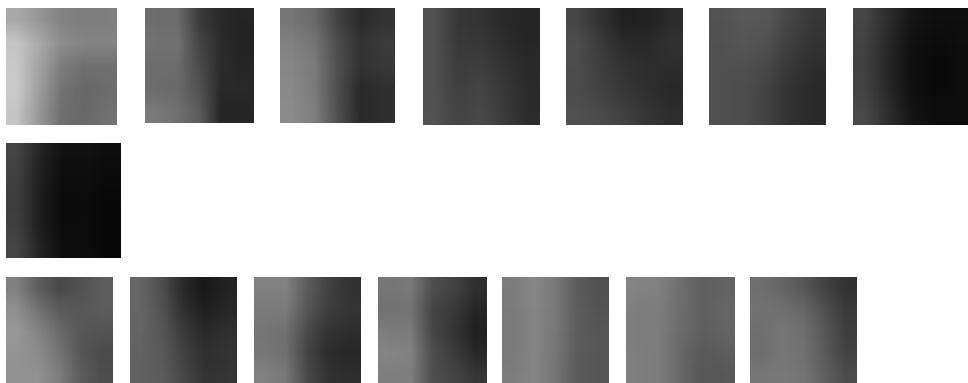
- Kategori 3



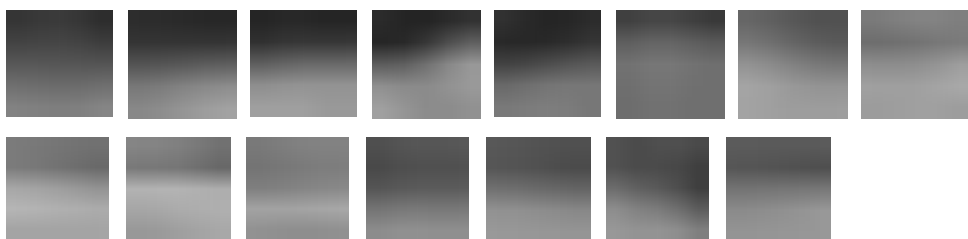
- Kategori 4



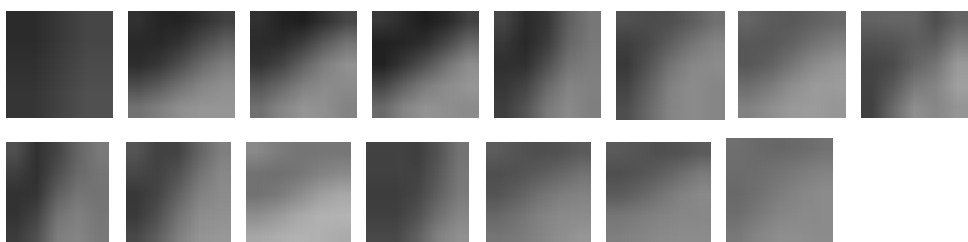
- Kategori 5



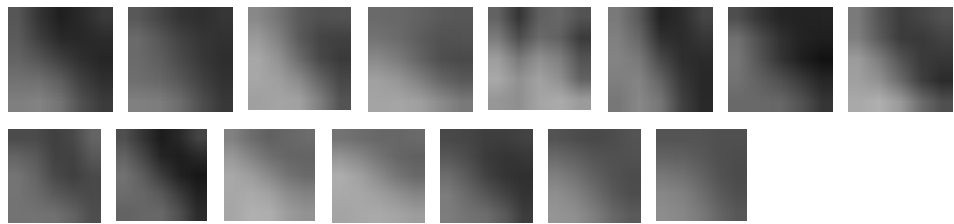
- Kategori 6



- Kategori 7



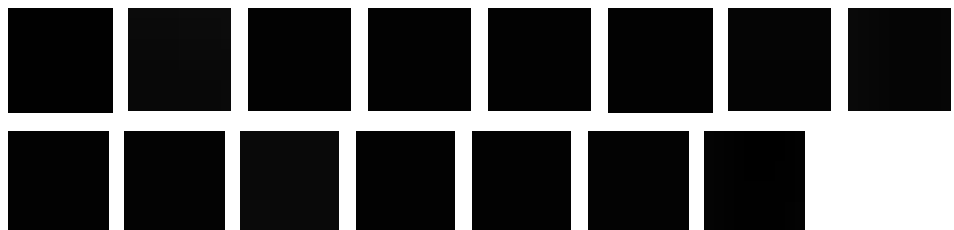
- Kategori 8



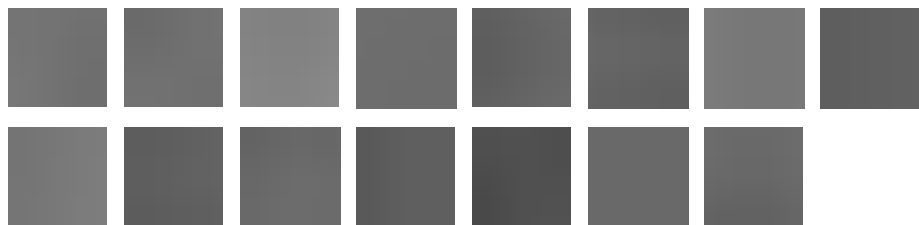
- Kategori 9



- Kategori 10

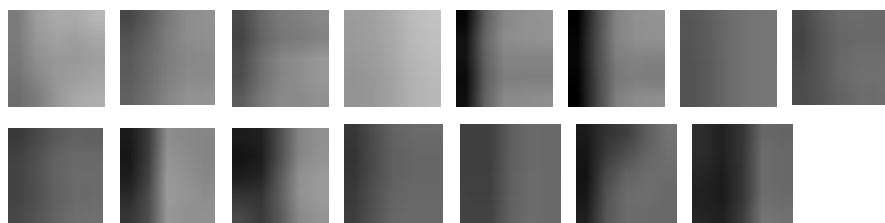


- Kategori 11



c. K2

- Kategori 1

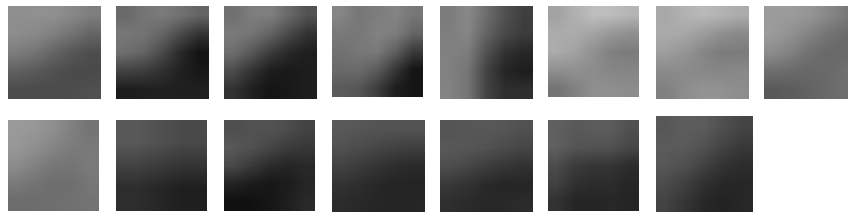


- Kategori 2

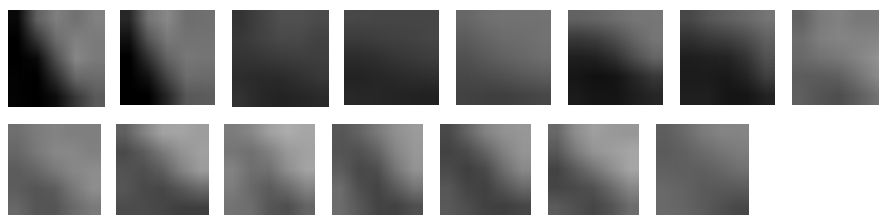




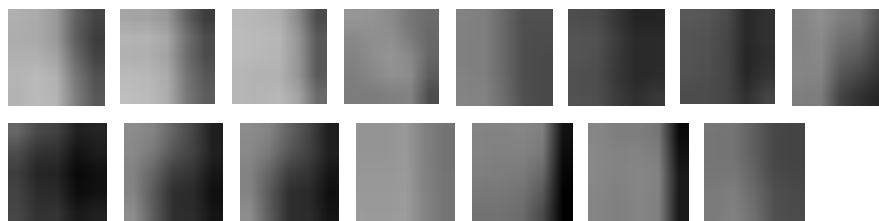
- Kategori 3



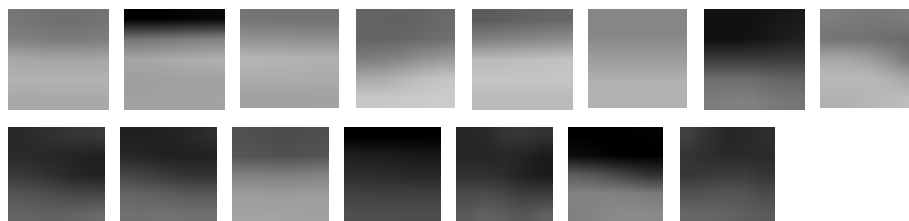
- Kategori 4



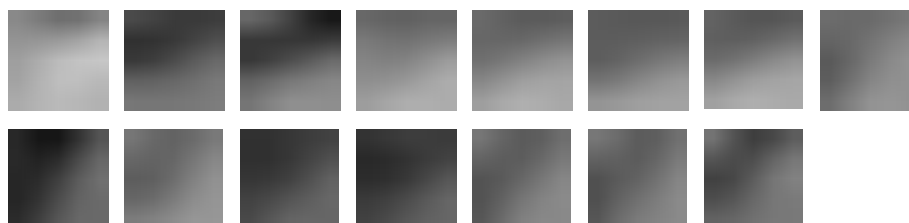
- Kategori 5



- Kategori 6



- Kategori 7



- Kategori 8

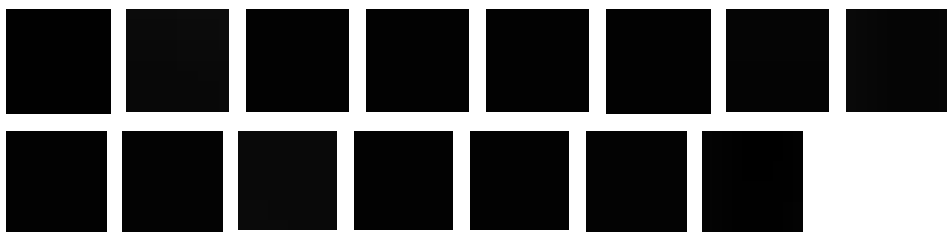




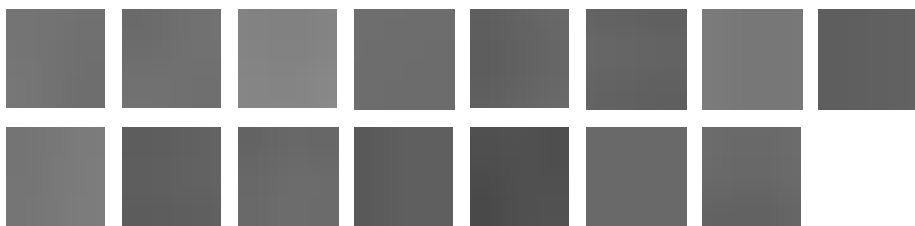
- Kategori 9



- Kategori 10



- Kategori 11



Citra testing

a. Indikasi

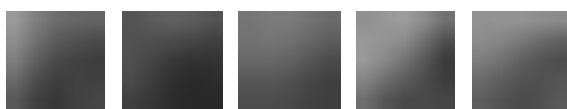
- Kategori 1



- Kategori 2



- Kategori 3



- Kategori 4



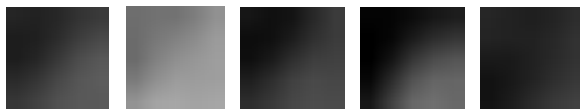
- Kategori 5



- Kategori 6



- Kategori 7



- Kategori 8



- Kategori 9



- Kategori 10



- Kategori 11



b. K1

- Kategori 1



- Kategori 2



- Kategori 3



- Kategori 4



- Kategori 5



- Kategori 6



- Kategori 7



- Kategori 8



- Kategori 9



- Kategori 10



- Kategori 11



c. K2

- Kategori 1



- Kategori 2



- Kategori 3



- Kategori 4



- Kategori 5



- Kategori 6



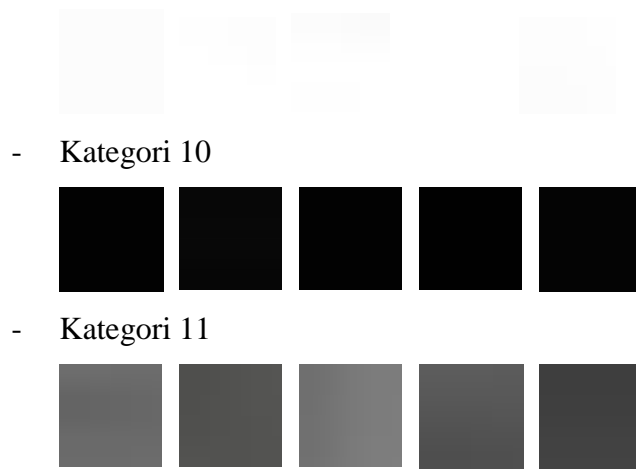
- Kategori 7



- Kategori 8

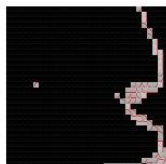
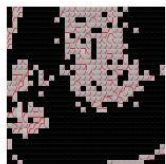
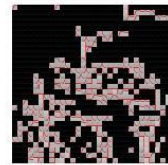
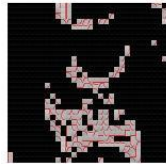


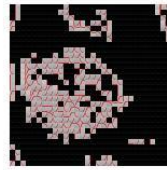
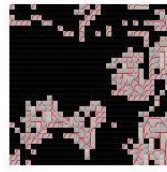
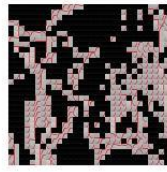
- Kategori 9



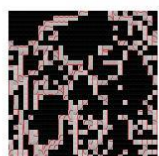
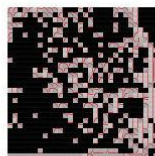
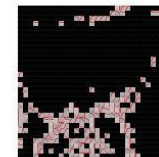
LAMPIRAN 2 : Citra hasil *deep learning*

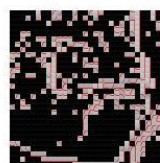
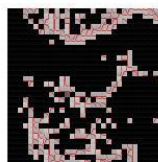
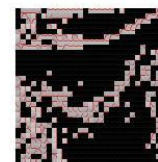
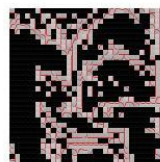
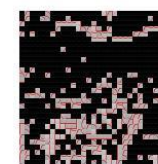
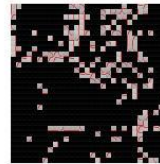
a. Indikasi



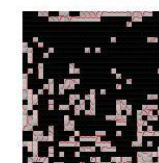
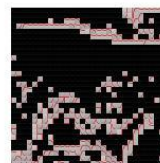
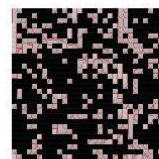
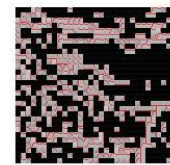
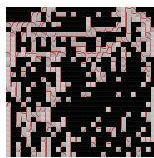
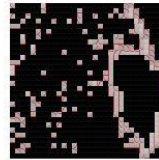
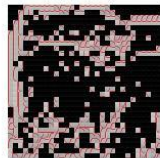
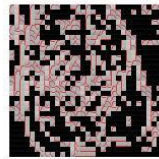
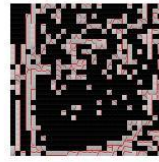
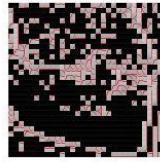


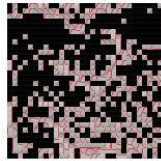
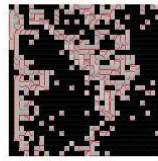
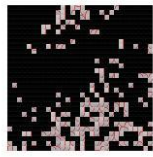
b. K1





c. K2





LAMPIRAN 3 : Skrip program

```

%% Path (default) %%
traingp = fullfile('D:', 'dentin tersier', 'trainingk2');
testgp = fullfile('D:', 'dentin tersier', 'testingk2');

traingp = imageDatastore(traingp, 'IncludeSubfolders',true, ...
    'LabelSource','foldernames','FileExtensions','.jpg');
testgp = imageDatastore(testgp, 'IncludeSubfolders',true, ...
    'LabelSource','foldernames','FileExtensions','.jpg');

layers = [imageInputLayer([5 5 3]) % dimensi gambar
    convolution2dLayer(2,10)
    maxPooling2dLayer(2,'Stride',2)
    fullyConnectedLayer(11) % change this based on # of
classes
    softmaxLayer
    classificationLayer()];

options =
trainingOptions('sgdm','MaxEpochs',50,'MiniBatchSize',5,...
    'InitialLearnRate',0.0001);

convnet = trainNetwork(traingp,layers,options);

sampleTest = testgp.Labels; %label yang sebenarnya

a = imread('D:\dentin tersier\k2\5.jpg');

kat1 = imread('kat1.jpg');
kat2 = imread('kat2.jpg');
kat3 = imread('kat3.jpg');
kat4 = imread('kat4.jpg');
kat5 = imread('kat5.jpg');
kat6 = imread('kat6.jpg');
kat7 = imread('kat7.jpg');
kat8 = imread('kat8.jpg');
kat10 = imread('kat10.jpg');

[c,d,e] = size(a);
ed = zeros(c,d,e);
for i = 1:5:c
    for j = 1:5:d
        x = a(i:i+4,j:j+4,1:3);
        o = classify(convnet,x);
        if o == '1'
            ed(i:i+4,j:j+4,1:3) = kat1;end
        if o == '2'
            ed(i:i+4,j:j+4,1:3) = kat2;end
        if o == '3'
            ed(i:i+4,j:j+4,1:3) = kat3;end
        if o == '4'
            ed(i:i+4,j:j+4,1:3) = kat4;end
    end
end

```

```
        if o == '5'
            ed(i:i+4,j:j+4,1:3) = kat5;end
        if o == '6'
            ed(i:i+4,j:j+4,1:3) = kat6;end
        if o == '7'
            ed(i:i+4,j:j+4,1:3) = kat7;end
        if o == '8'
            ed(i:i+4,j:j+4,1:3) = kat8;end
        if o == '9'
            ed(i:i+4,j:j+4,1:3) = kat10;end
        if o == '10'
            ed(i:i+4,j:j+4,1:3) = kat10;end
        if o == '11'
            ed(i:i+4,j:j+4,1:3) = kat10;end
    end
end
ed = uint8(ed);
imshow(ed);

p = classify(convnet,testgp);

accuracy = mean(sampleTest == p)

figure;
for i = 1:55
    subplot(5,10,i);
    imshow(testgp.Files{i});
    title(char(p(i)))
end
```