Nama : Bagas Prasetyo Nugroho

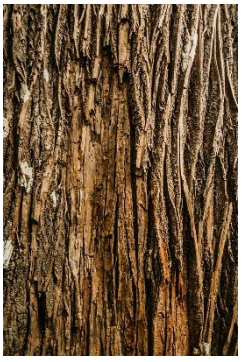
Nim : 1918013

EKSTRAKSI CIRI TEKSTUR

CITRA KULIT POHON

NO	Gambar	Contras (Avg)	Corelation (Avg)	Energy (Avg)	Homogeneity (Avg)	Avg (Energy +Homogeinity	Pengelompokan
1		1.97795	0.655851	0.0403083	0.640904	0.340606	Kasar
2		1.73708	0.583068	0.048972	0.631568	0.34027	Kasar
3		1.91565	0.697702	0.0386511	0.635925	0.337288	Kasar
4		1.2397	0.818766	0.0475681	0.701243	0.374406	Kasar
5		1.31325	0.720083	0.0527361	0.683926	0.368331	Kasar
6		0.738884	0.816304	0.0715521	0.755773	0.413663	Halus
7		2.31369	0.630191	0.0423223	0.6161648	0.329235	Kasar

							
8		2.37511	0.632047	0.0400662	0.605358	0.322712	Kasar
9		0.842039	0.88697	0.0936083	0.783188	0.438398	Halus
10		1.14459	0.752372	0.0996559	0.729345	0.4145	Halus
11		2.33555	0.593677	0.0458669	0.61694	0.331404	Kasar
12		0.881332	0.849792	0.0691851	0.764884	0.417035	Halus

13		1.93268	0.622649	0.0603782	0.658387	0.359383	Kasar
14		0.881332	0.849792	0.0691851	0.764884	0.417035	Halus
15		1.9991	0.69268	0.0845652	0.682881	0.383726	Kasar
16		2.16534	0.651072	0.039591	0.618082	0.328836	Kasar
17		1.17441	0.829328	0.0714069	0.727218	0.399312	Kasar
18		0.836654	0.892612	0.0763353	0.771588	0.423961	Halus
19		0.967971	0.814829	0.0647023	0.725017	0.39486	Kasar

20		2.31369	0.630191	0.0423223	0.616148	0.329235	Kasar

1. Kasar

   Avg (Homogeneity + Energy) < 0,4

2. Halus

   Avg (Homogeneity + Energy) >= 0,4 dan < 0,5

3. Teratur

   Avg (Homogeneity + Energy) >= 0,5

Source Code

```
% --- Executes on button press in pushbutton1.
function pushbutton1_Callback(hObject, eventdata, handles)
% hObject    handle to pushbutton1 (see GCBO)
% eventdata  reserved - to be defined in a future version of MATLAB
% handles    structure with handles and user data (see GUIDATA)

% menampilkan menu open file
[nama_file, nama_path] = uigetfile('*.jpg');

if ~isequal(nama_file,0)
    % membaca file citra
    Img = im2double(imread(fullfile(nama_path, nama_file)));
    % menampilkan citra pada axes 1
    axes(handles.axes1)
    imshow(Img)
    % menyimpan variabel Img pada lokasi handles
    handles.Img = Img;
    guidata(hObject, handles)
else
    % jika tidak ada file yang dipilih maka akan kembali
    return
end

% --- Executes on button press in pushbutton2.
function pushbutton2_Callback(hObject, eventdata, handles)
% hObject    handle to pushbutton2 (see GCBO)
% eventdata  reserved - to be defined in a future version of
MATLAB
% handles    structure with handles and user data (see GUIDATA)

% memanggil variabel Img, Img_gray, & bw yang ada di lokasi
handles
Img = handles.Img;
```

```
% konversi citra RGB menjadi grayscale
Img_gray = rgb2gray(Img);

% ekstraksi ciri tekstur GLCM
GLCM = graycomatrix(Img_gray,'Offset',[0 1; -1 1; -1 0; -1 -1]);
stats =
graycoprops(GLCM,{'contrast','correlation','energy','homogeneity'}
);
Contrast = mean(stats.Contrast);
Correlation = mean(stats.Correlation);
Energy = mean(stats.Energy);
Homogeneity = mean(stats.Homogeneity);


set(handles.edit1,'string',Contrast );
set(handles.edit2,'string',Correlation);
set(handles.edit3,'string',Energy);
set(handles.edit4,'string',Homogeneity);


jumlah = (Homogeneity+Energy)/2;
set(handles.edit7,'string',jumlah);
if(jumlah < 0.4)
    set(handles.edit5,'string','Kasar');
end
if(jumlah >= 0.4 && jumlah < 0.5)
    set(handles.edit5,'string','Halus');
end
if(jumlah >= 0.5)
    set(handles.edit5,'string','Teratur');
end;
function edit1_Callback(hObject, eventdata, handles)
```