```
mydir='/MATLAB Drive/BirdsSet - Selected/SCARLET MACAW-class-9';
fileformat='*.jpg';
dd=dir(fullfile(mydir,fileformat));
assert(numel(dd) > 0, 'No file was found. Check that the path is correct');
my_img = struct('img', cell(size(dd)));
k=numel(dd)+1;
for zz=1:numel(dd)
    my_img(zz).img = imread(fullfile(mydir,dd(zz).name));
end
```

```
for i=1:numel(dd)
    c_r_1=0;
    c_r_2=0;
    c_g_1=0;
    c_g_2=0;
    c_b_1=0;
    c_b_2=0;
    current=imresize(my_img(i).img,[400,400]);

    %Color features
    r=mean(mean(current(:,:,1)));
    g=mean(mean(current(:,:,2)));
    b=mean(mean(current(:,:,3)));
    stdr = std2(current(:,:,1));
    stdg = std2(current(:,:,2));
    stdb = std2(current(:,:,3));
    %grayscale
    g_img1=rgb2gray(current);
    g_img=double(edge(g_img1,'Canny',0.2));
    %statistical measures
    av=mean(mean(g_img));
    med=median(median(g_img));
    st_dev=std(std(double(g_img)));
    max_=max(max(g_img));
    min_=min(min(g_img));
    [M,N]=size(g_img);
    area=M*N;

    %entropy values (texture features)
    e=entropy(g_img);

    %Above & Below
    for i = 1:M
        for j = 1:N
            R=current(i,j,1);
            G=current(i,j,2);
            B=current(i,j,3);
            if(R>r)
                c_r_1=c_r_1+1;
            end
            if(G>g)
                c_g_1=c_g_1+1; end
            if(B>b)
```

```
                c_b_1=c_b_1+1;
            end
            if(R<r)
                c_r_2=c_r_2+1;
            end
            if(G<g)
                c_g_2=c_g_2+1;
            end
            if(B<b)
                c_b_2=c_b_2+1;
            end
        end
    end
    %Column Values

    rgb1=[r,g,b,stdr,stdg,stdb,av,med,st_dev,max_,min_,area,e,c_r_1,c_r_2,c_g_1,c_g_2,c
    %Writing into Excel Sheets
    writematrix(rgb1,'IVA2.csv','WriteMode', 'append');
end
```