clc

clear all

number\_of\_classes = 5;

DBFolder=dir('C:\Users\yaseen\Documents\MATLAB\program\HEARBEATSOUNDSIGNAL50FILES');

DBSize=length(DBFolder);

Features=zeros(1,480);

k=1;

lables=zeros(1, number\_of\_classes);

for i=3:DBSize

SFolder=dir(strcat('C:\Users\yaseen\Documents\MATLAB\program\HEARBEATSOUNDSIGNAL50FILES\',DBFolder(i).name,'\\*.wav'));

addpath(strcat('C:\Users\yaseen\Documents\MATLAB\program\HEARBEATSOUNDSIGNAL50FILES\',DBFolder(i).name));

SFSize=length(SFolder);

for j=1:SFSize

filename = SFolder(j).name; % file name to be loaded

[y, Fs] = audioread(filename, 'native'); % signal bieng loaded having data in variable y and frequency Fs

c = melcepst(y, 8000 , 16, 24, (0.03 \* Fs));%19, 24

[rr,cc]=size(c);

for m=1:30:rr-mod(rr,30)

Features(k,:)=reshape(c(m:m+29,1:16),[1 480]);

Lables(k,i-2)=1;

k=k+1;

end

end

end

%converting to table

FeaturesX=array2table(Features);

lablesY=cell2table(lables');

TrainingData=[FeaturesX lablesY];