clear all

clc

disp('Sampling Frequency is set at 75 hz')

disp(' ')

disp('File being processed:')

direc=dir('\*.bin');

fnames={direc.name};

numfiles=length(fnames);

All\_Data=[];

for t=1:numfiles

 filename=fnames {t};

 Name\_1=filename;

 disp(Name\_1);

 [hdr, time, xyz, light, but] = binread(filename); %Read in the bin file

[Name]=textscan(Name\_1, '%s %s', 'delimiter','.'); %Seperates ID number from .xls extension

ID=Name{1,1}; %Selects the ID number

Extension1='\_filtered.csv';

New\_Name1=char(strcat(ID,Extension1));

 [Filtered\_data] = filterbin(xyz, time);%Apply Bandpass filter and calculate signal vector magnitude

 dlmwrite(New\_Name1,Filtered\_data,'delimiter',',','precision',15);

clear xyz

clear time

clear Filtered\_data

end

disp(' ')

disp('Columns 1:4 of the .csv are:[time, filt x, filt y, filt z]');