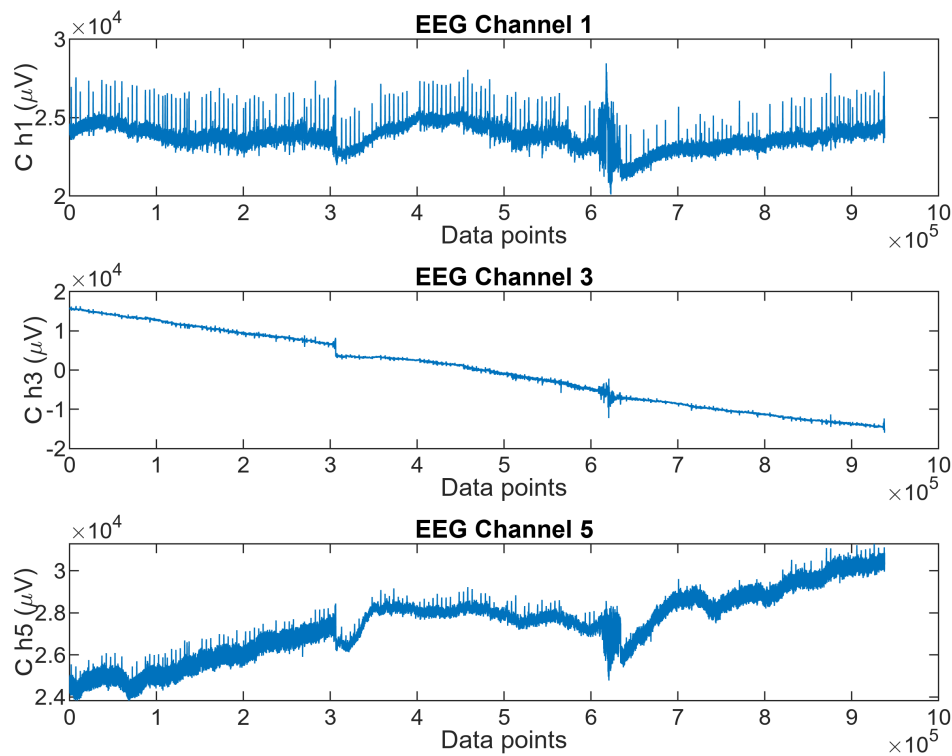


```
% Clear the workspace and command window
clear
% Define the number of channels in the EEG data
channelno=34;
% Open file in read-binary mode
fileID = fopen('lab5.eeg', 'rb');
% Read the entire binary file as float32 data
eeg_data = fread(fileID, inf, 'float32');
size(eeg_data)
```

```
ans = 1×2
      31884180      1
```

```
% Reshapes the data into channelno rows and multiple columns
eeg_data=reshape(eeg_data,channelno,[]);
% Close the file after reading the data
fclose(fileID);
% Plot EEG waveforms of the 1st, 3rd, and 5th channels
figure;
% Plot the data for the 1st channel
% Create the first subplot in a 3-row layout
subplot(3,1,1);
plot(eeg_data(:,1));
% Set the x-axis limits to show the first 100 samples
title('EEG Channel 1');
xlabel('Data points');
ylabel('C h1 (\muV)');
% Plot the data for the 3rd channel
% Create the second subplot in a 3-row layout
subplot(3,1,2);
plot(eeg_data(:,3));
title('EEG Channel 3');
xlabel('Data points');
ylabel('C h3 (\muV)');
% Plot the data for the 5th channel
% Create the third subplot in a 3-row layout
subplot(3,1,3);
plot(eeg_data(:,5));
title('EEG Channel 5');
xlabel('Data points');
ylabel('C h5 (\muV)')
```



```
% Select the data from channels 1, 3, and 5
selected_channels = eeg_data(:,[1, 3, 5]);
% Save the selected channels to an ASCII file
save('selected_eeg_data.txt', 'selected_channels', '-ascii');
```

%Today's lab is also quite interesting, we can now import data from the %computer and process it. allowing us to plot the graph. Additionally, we %can output ASCII to a txt file.

Editor - E:\Matlab\LAB5\selected_eeg_data.txt				
LAB5.mlx x LAB5.mlx x selected_eeg_data.txt x +				
1	2.4168031e+04	1.5514031e+04	2.4573031e+04	
2	2.4094477e+04	1.5579484e+04	2.4438477e+04	
3	2.4016594e+04	1.5642594e+04	2.4267594e+04	
4	2.4072859e+04	1.5646859e+04	2.4355859e+04	
5	2.4273266e+04	1.5688266e+04	2.4624266e+04	
6	2.4464266e+04	1.5748266e+04	2.4888266e+04	
7	2.4555312e+04	1.5802312e+04	2.4975312e+04	
8	2.4441719e+04	1.5768719e+04	2.4842719e+04	
9	2.4368719e+04	1.5753719e+04	2.4698719e+04	
10	2.4258562e+04	1.5750562e+04	2.4519562e+04	
11	2.4133305e+04	1.5754305e+04	2.4345305e+04	
12	2.4089656e+04	1.5695656e+04	2.4329656e+04	
13	2.4115359e+04	1.5665359e+04	2.4449359e+04	
14	2.4235484e+04	1.5656484e+04	2.4658484e+04	
15	2.4371078e+04	1.5648078e+04	2.4748078e+04	
16	2.4353984e+04	1.5568984e+04	2.4702984e+04	
17	2.4236234e+04	1.5524234e+04	2.4550234e+04	
18	2.4083000e+04	1.5487000e+04	2.4354000e+04	
19	2.4051344e+04	1.5676344e+04	2.4317344e+04	
20	2.4096055e+04	1.5779062e+04	2.4311055e+04	
21	2.4254547e+04	1.5696547e+04	2.4413547e+04	
22	2.4410578e+04	1.5683578e+04	2.4582578e+04	
23	2.4517266e+04	1.5685266e+04	2.4744266e+04	
24	2.4523922e+04	1.5704922e+04	2.4827922e+04	
25	2.4386281e+04	1.5681281e+04	2.4682281e+04	
26	2.4222031e+04	1.5614031e+04	2.4463031e+04	
27	2.4094305e+04	1.5620312e+04	2.4335305e+04	
28	2.4016039e+04	1.5663031e+04	2.4262039e+04	
29	2.4090547e+04	1.5688547e+04	2.4395547e+04	
30	2.4231188e+04	1.5721188e+04	2.4605188e+04	
31	2.4368688e+04	1.5722688e+04	2.4806688e+04	
32	2.4429312e+04	1.5677312e+04	2.4852312e+04	
33	2.4416141e+04	1.5662141e+04	2.4810141e+04	
34	2.4350859e+04	1.5724859e+04	2.4690859e+04	
35	2.4240234e+04	1.5706234e+04	2.4499234e+04	
36	2.4062695e+04	1.5608695e+04	2.4269695e+04	
37	2.4042812e+04	1.5607812e+04	2.4235812e+04	
38	2.4180766e+04	1.5647766e+04	2.4426766e+04	
39	2.4391984e+04	1.5716984e+04	2.4727984e+04	
40	2.4526625e+04	1.5772625e+04	2.4925625e+04	
41	2.4588516e+04	1.5806516e+04	2.4942516e+04	