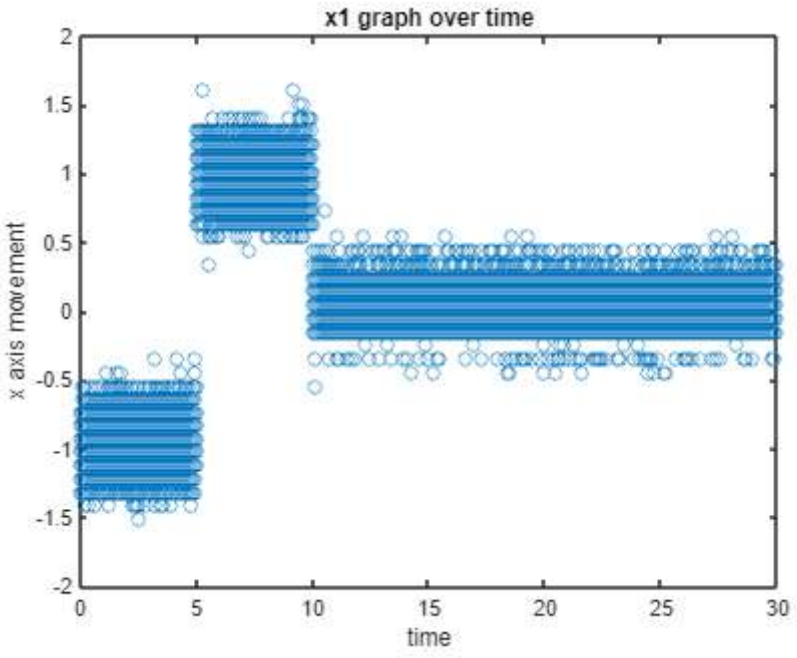
```
clear
clc

format long
TestDat = readtable('TESTDAT.csv');
```

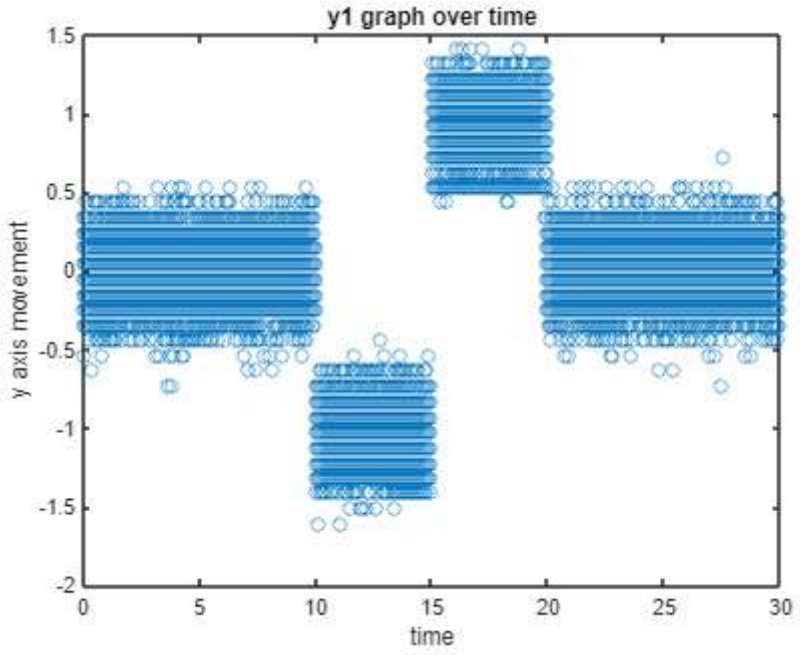
```
Warning: Column headers from the file were modified to make them valid MATLAB identifiers before c
Set 'VariableNamingRule' to 'preserve' to use the original column headers as table variable names.
```

```
time = table2array(TestDat(:,1));
dt = table2array(TestDat(:,2));
scanNum = table2array(TestDat(:,3));
x1 = table2array(TestDat(:,4));
y1 = table2array(TestDat(:,5));
z1 = table2array(TestDat(:,6));

x2 = table2array(TestDat(:,7));
y2 = table2array(TestDat(:,8));
z2 = table2array(TestDat(:,9));

gx1 = table2array(TestDat(:,10));
gy1 = table2array(TestDat(:,11));
gz1 = table2array(TestDat(:,12));

figure(1)
plot(time, x1, 'o')
title('x1 graph over time')
xlabel('time')
ylabel('x axis movement')
```

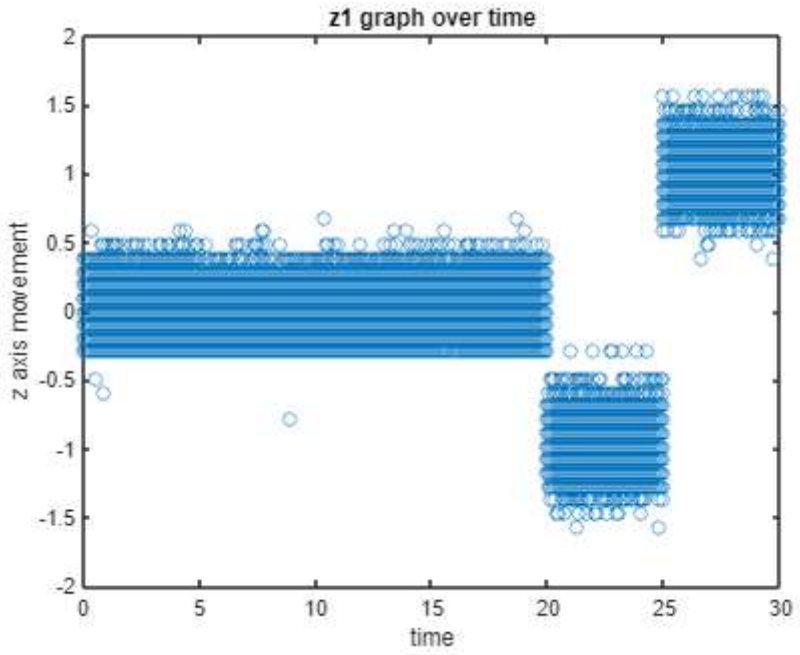



```
figure(2)
```

```
plot(time, y1, 'o')
title('y1 graph over time')
xlabel('time')
ylabel('y axis movement')
```

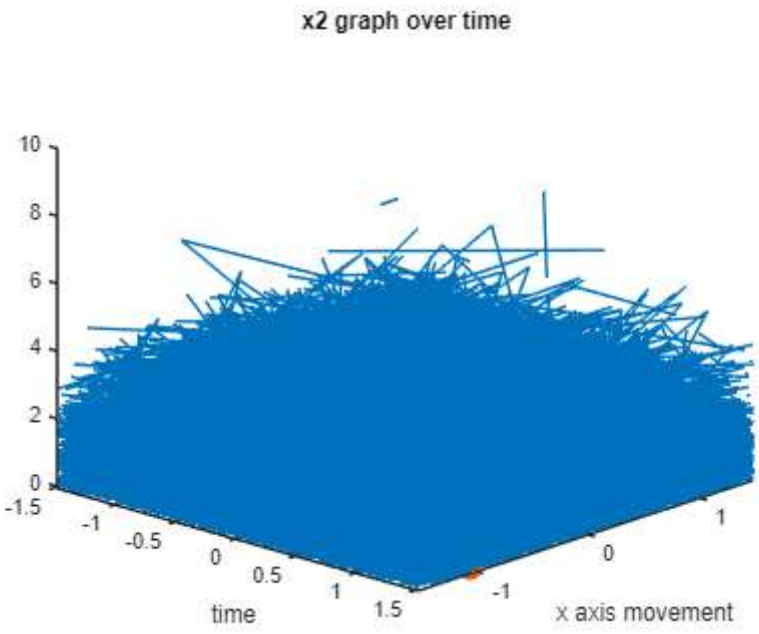



```
figure(3)
plot(time, z1, 'o')
title('z1 graph over time')
xlabel('time')
ylabel('z axis movement')
```

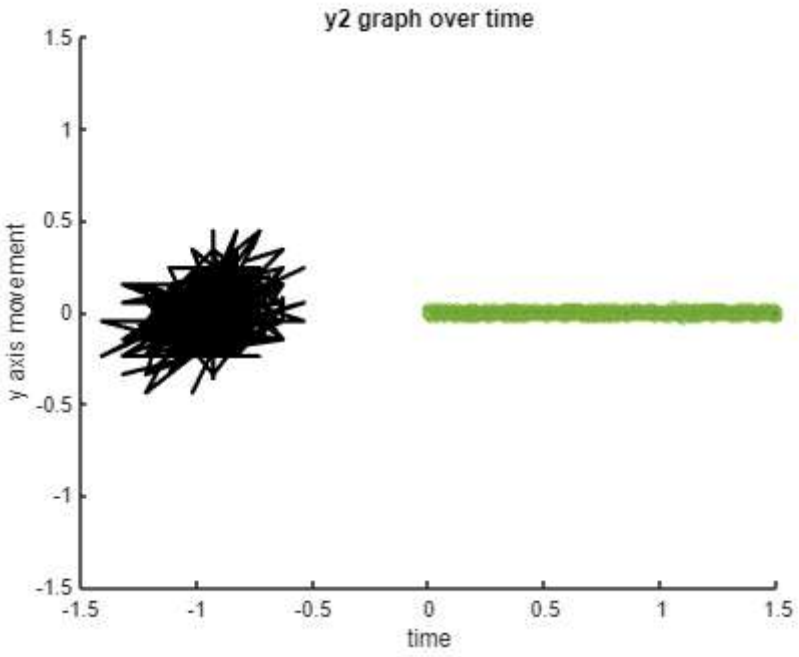



```
figure(4)
plot(time, x2, 'o')
title('x2 graph over time')
```

```
xlabel('time')
ylabel('x axis movement')
```

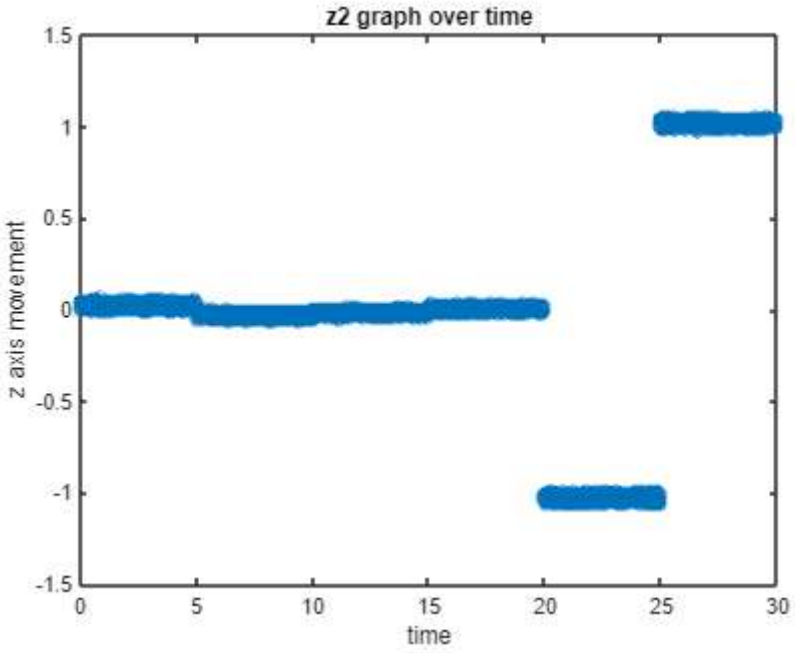



```
figure(5)
plot(time, y2, 'o')
title('y2 graph over time')
xlabel('time')
ylabel('y axis movement')
```

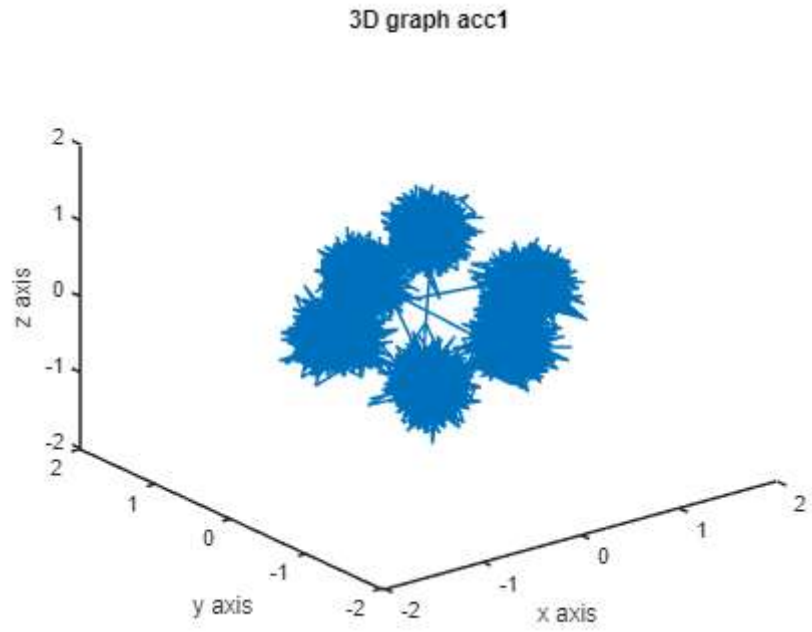



```
figure(6)
plot(time, z2, 'o')
title('z2 graph over time')
xlabel('time')
```

```
ylabel('z axis movement')
```

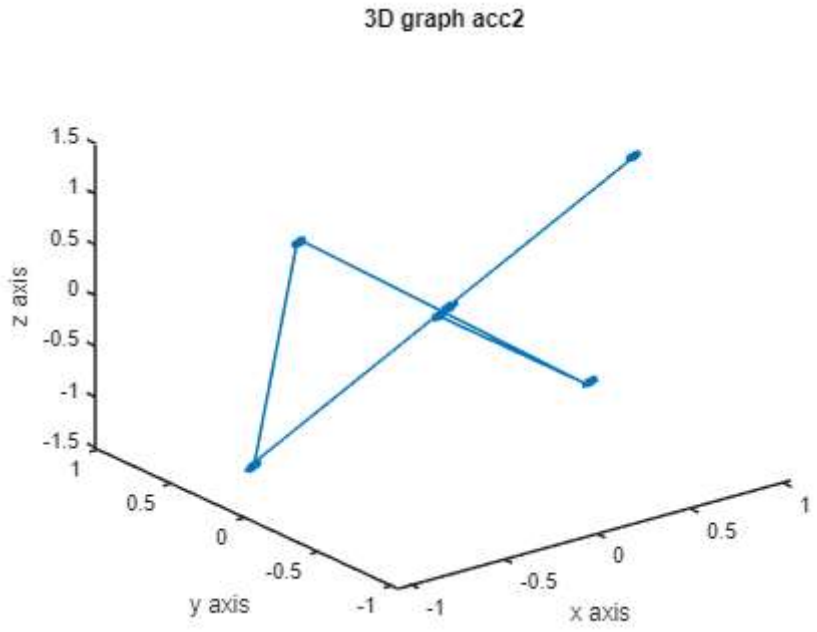



```
figure(7)
plot3(x1,y1,z1)
title('3D graph acc1')
xlabel('x axis')
ylabel('y axis')
zlabel('z axis')
```

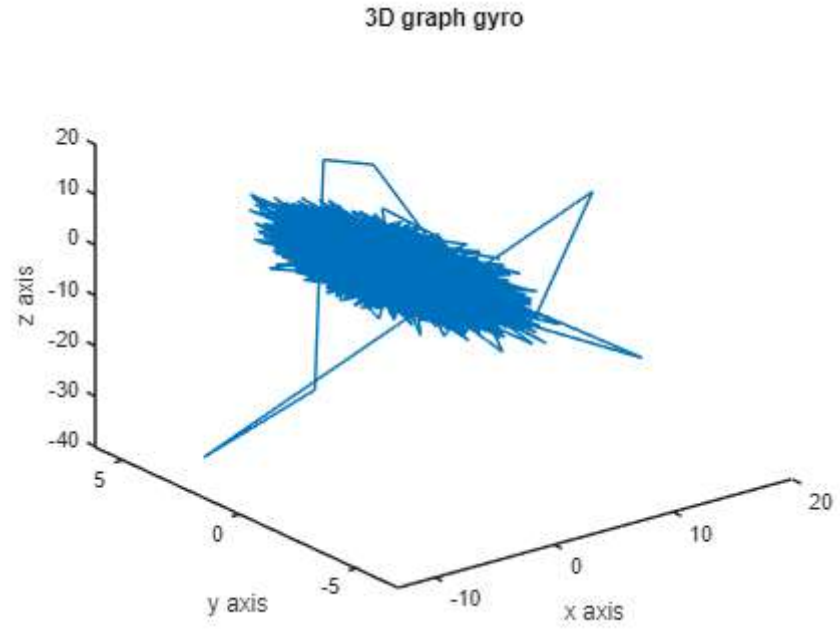



```
figure(8)
plot3(z2,y2,z2)
title('3D graph acc2')
xlabel('x axis')
ylabel('y axis')
```

```
zlabel('z axis')
```

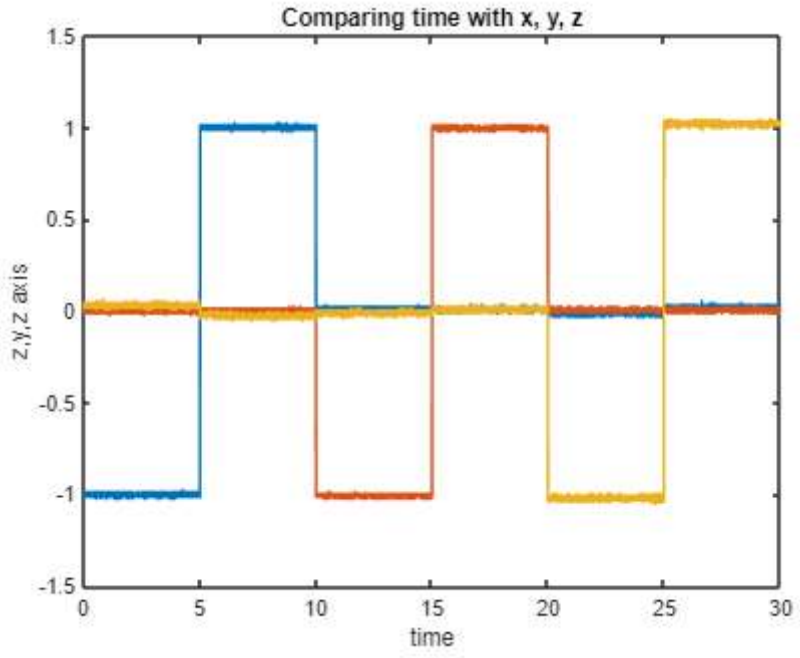



```
figure(9)
plot3(gx1,gy1,gz1)
title('3D graph gyro')
xlabel('x axis')
ylabel('y axis')
zlabel('z axis')
```

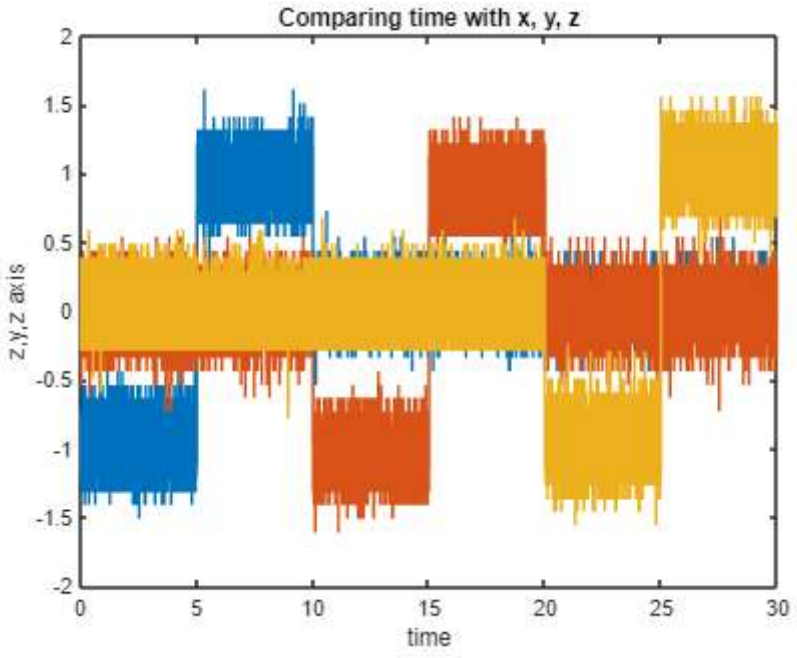



```
figure(10)
plot(time, x2)
hold on
```

```
plot(time, y2)
plot(time, z2)
title('Comparing time with x, y, z')
xlabel('time')
ylabel('z,y,z axis')
hold off
```




```
figure(11)
plot(time, x1)
hold on
plot(time, y1)
plot(time, z1)
title('Comparing time with x, y, z')
xlabel('time')
ylabel('z,y,z axis')
hold off
```




```
curve = animatedline('LineWidth',2);
set(gca,'XLim',[-1.5 1.5],'YLim',[-1.5 1.5],'ZLim',[0 10]);
%view(43,24);

figure(12)
hold on;
for i=1:length(z1)
    addpoints(curve,x1(i),y1(i),z1(i));
    head = scatter3(x1(i),y1(i),z1(i),'filled','MarkerFaceColor','b');
    drawnow
    pause(0.01);
    delete(head);
end
```