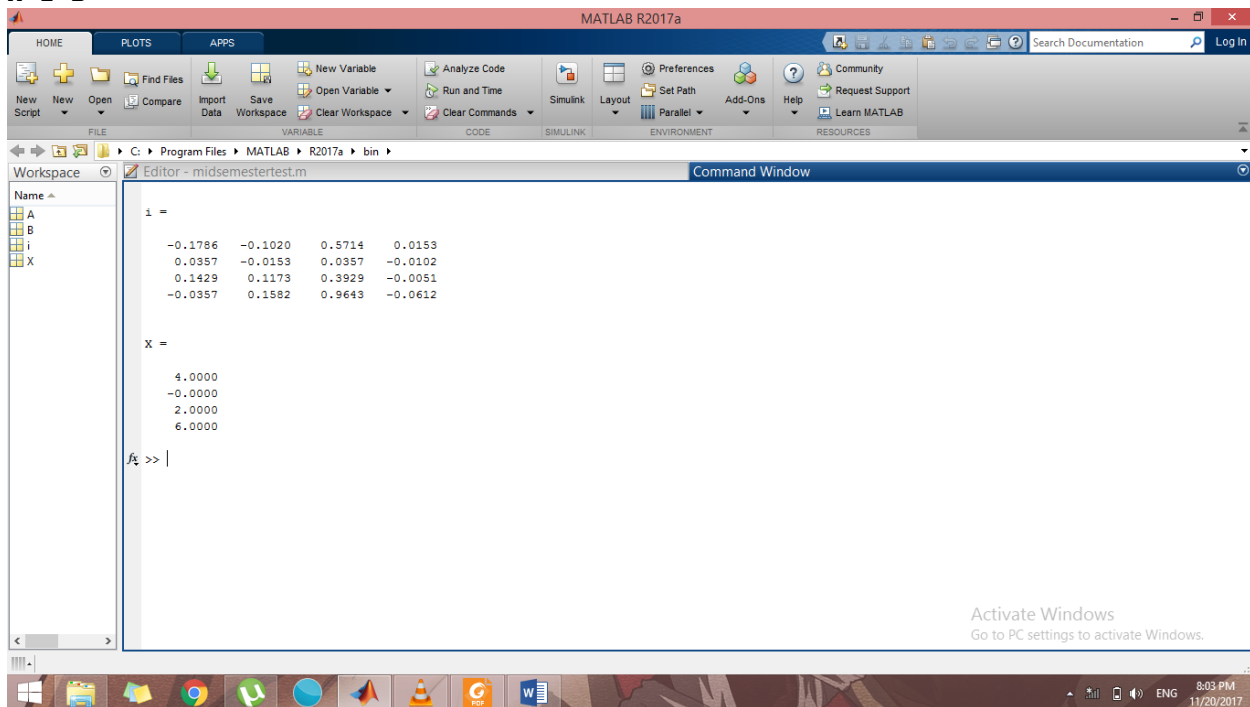


SALAKO EMMANUEL AYOMIDE
ELECT/ELECT
16/ENG04/052

A

```
commandwindow
clear
clc
A=[0,10,4,-2;
   -3,-17,1,2;
   1,1,1,0;
   8,-34,16,-10];
B=[-4;2;6;4];
i=inv(A)
X=i*B
```



The screenshot shows the MATLAB R2017a interface. The Command Window displays the following output:

```
i =
   -0.1786   -0.1020    0.5714    0.0153
    0.0357   -0.0153    0.0357   -0.0102
    0.1429    0.1173    0.3929   -0.0051
   -0.0357    0.1582    0.9643   -0.0612

X =
    4.0000
   -0.0000
    2.0000
    6.0000

fx >> |
```

The Workspace window on the left shows the following variables:

Name	Size
A	4x4
B	4x1
i	4x4
X	4x1

B

```
Commandwindow
clear
clc
close all
syms t
d=1.5*exp(-0.75*t)*sin(0.85*t)+0.37*t
tn=[0:0.01:2.5]
dn=subs(d,tn)
plot(tn,dn)
xlabel('time (min)')
ylabel('distance (km)')
axis tight
grid on
grid minor
```

```

v=diff(d)
vn=subs(v,tn)
plot(tn,vn)
xlabel('time (min)')
ylabel('velocity(km/min)')
axis tight
grid on
grid minor
a=diff(v)
an=subs(a,vn)
plot(tn,an)
xlabel('time (min)')
ylabel('acceleration(km/min^2)')
axis tight
grid on
grid minor
plot(tn,dn,tn,vn,tn,an)
xlabel('time (min)')
ylabel('variable')
legend('distance (km) ','velocity(km/min) ','acceleration(km/min^2)')
axis tight
grid on
grid minor

```

