



AMERICAN INTERNATIONAL UNIVERSITY BANGLADESH

Assignment Title:	Lab Report		
Assignment No:	1	Date of Submission:	03-02- 2022
Course Title:	Data Communication		
Course Code:	00408	Section:	E
Semester:	Spring	2021-22	Course Teacher: Tanjil Amin

No	Name	ID	Program
1	Samir Faisal	19-41037-2	BSc [CSE]

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Answer to the question no-(a)

Id: 19-41037-2

AB-CDEFG-H

```
t=0:0.001:2;
k1=10;
k2=11;
j1=28*(pi/180);
j2=30*(pi/180);
x1=k1*cos(2*pi*8*t+j1);
figure
plot(t,x1,'linewidth', 1);
xlabel('Time (s)');
ylabel('Amplitude');
title('x1=k1*cos(2*pi*8*t+j1)');

x2=k2*cos(2*pi*10*t+j2);
figure
plot(t,x2,'linewidth', 1);
xlabel('Time (s)');
ylabel('Amplitude');
title('x2=k2*cos(2*pi*10*t+j2)');
```

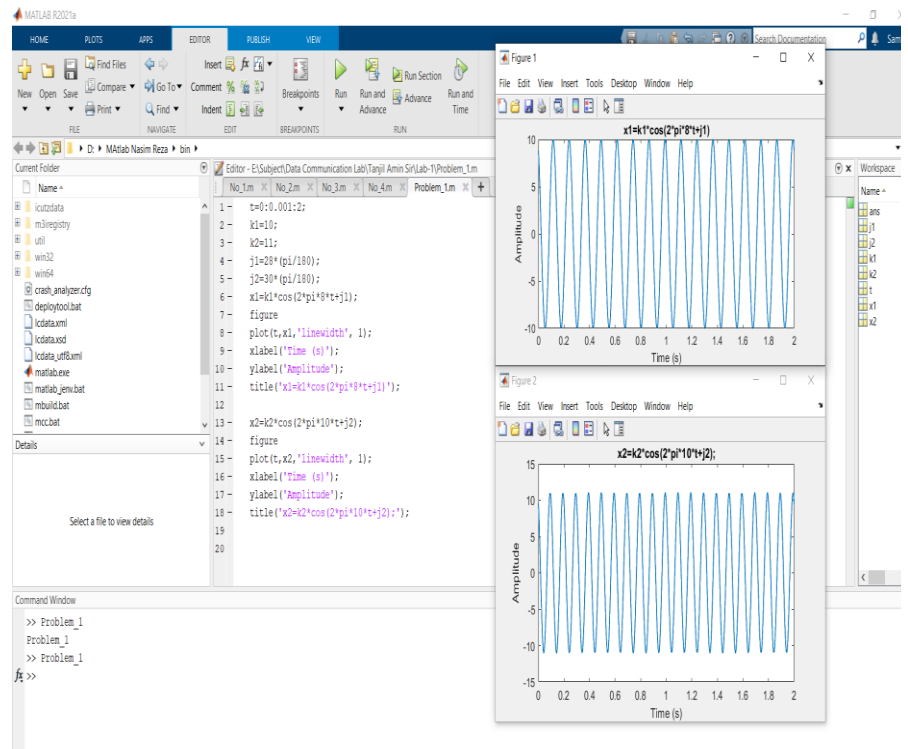


Figure 1: Problem-a

Answer to the question no-(b)

```
t=0:0.001:2;
k1=10;
k2=11;
j1=28*(pi/180);
j2=30*(pi/180);
x1=k1*cos(2*pi*8*t+j1);
x2=k2*cos(2*pi*10*t+j2);
x3=x1 + x2;
plot(t,x3,'linewidth',1);
xlabel('Time (s)');
ylabel('Amplitude');
title('x1+x2');
```

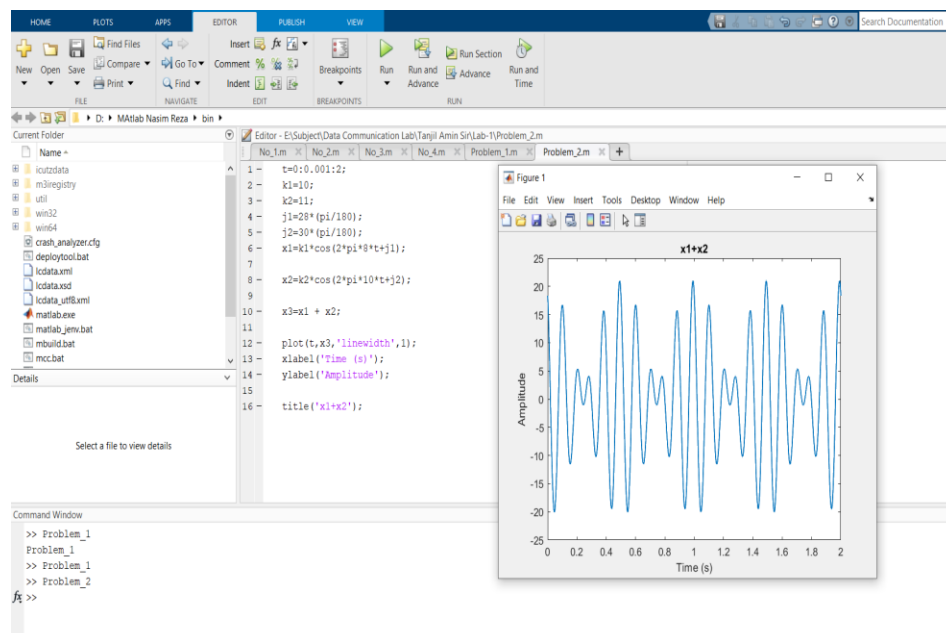


Figure 2: Problem-b

Answer to the question no-(c)

```
t=0:0.001:2;
k1=10;
k2=11;
j1=28*(pi/180);
j2=30*(pi/180);
x1=k1*cos(2*pi*8*t+j1);
subplot(3,1,1);
plot(t,x1,'linewidth',1);
xlabel('Time (s)');
ylabel('Amplitude');
title('x1=k1*cos(2*pi*8*t+j1)');
x2=k2*cos(2*pi*10*t+j2);
subplot(3,1,2);
plot(t,x2,'linewidth',1);
xlabel('Time (s)');
ylabel('Amplitude');
title('x2=k2*cos(2*pi*10*t+j2)');
x3=k1*cos(2*pi*8*t+j1) + k2*cos(2*pi*10*t+j2);
subplot(3,1,3);
plot(t,x3,'linewidth',1);
xlabel('Time (s)');
ylabel('Amplitude');
plot(t,x3,'linewidth',1);
xlabel('Time (s)');
ylabel('Amplitude');
title('x1+x2');
```

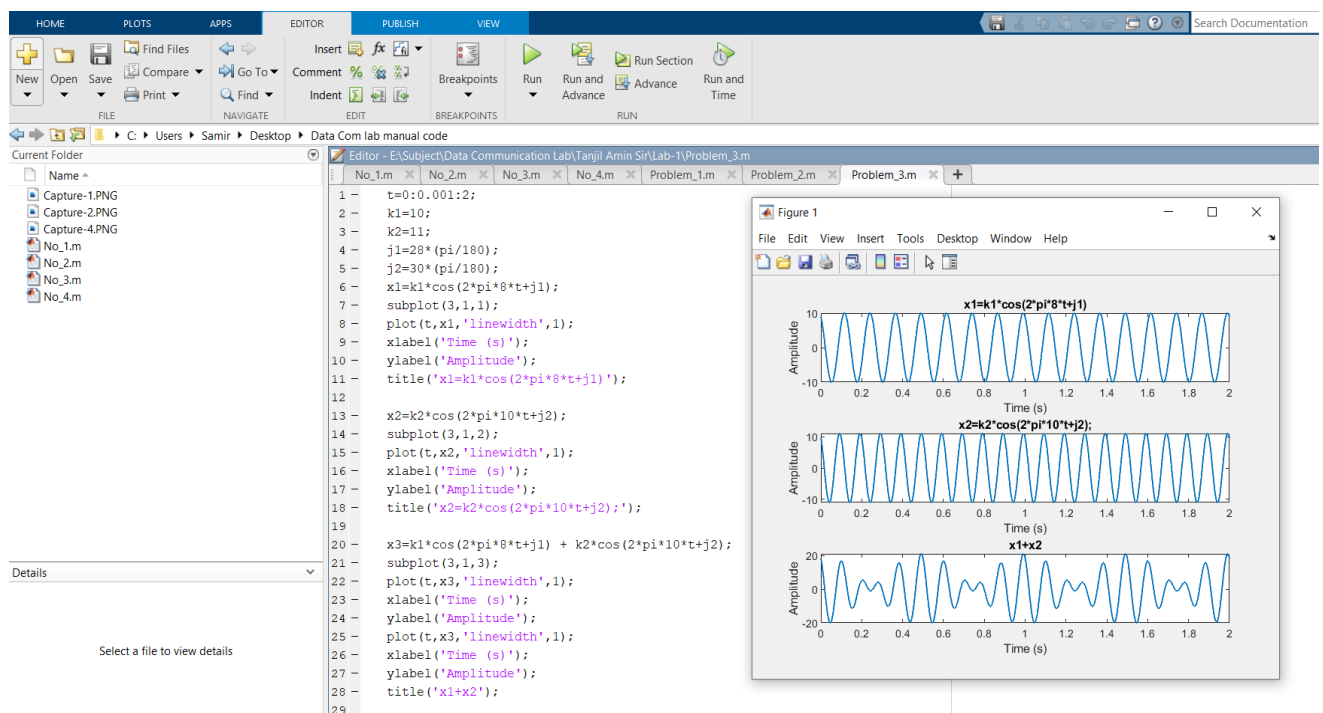


Figure 3: Problem-c