```
clc;
clear all;
close all;

t=0:0.0005:0.05
```

```
t = 1×101
         0    0.0005    0.0010    0.0015    0.0020    0.0025    0.0030 ⋯
```

```

f=input("Enter the frequency f: ");

% sin (200πt)
x1=sin(2*pi*f*t);
subplot(3,1,1);
plot(t,x1);
xlabel('Time');
ylabel('Amplitude');
title('Fig 1: cos(2πft)');

% sin (200πt + π/6)
x2=sin(2*pi*f*t+pi/6);
subplot(3,1,2);
plot(t,x2);
xlabel('Time');
ylabel('Amplitude');
title('Fig 2: sin(2πft+π/6)');

% sin(200πt - π/6)
x3=sin(2*pi*f*t-pi/6);
subplot(3,1,3);
plot(t,x3);
xlabel('Time');
ylabel('Amplitude');
title('Fig 3: cos(2πft-π/6)');
```

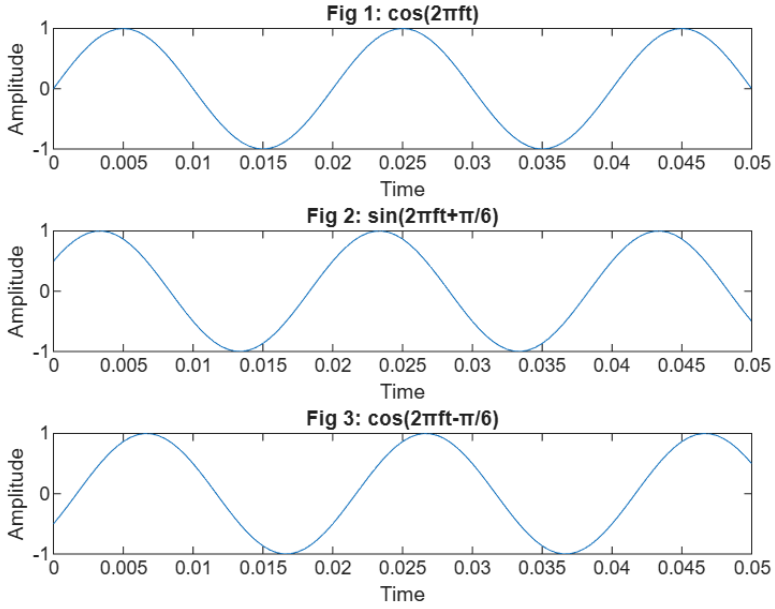
Fig 1: cos(2πft)
Amplitude
Time
1
0
-1
0
0.005
0.01
0.015
0.02
0.025
0.03
0.035
0.04
0.045
0.05
Fig 2: sin(2πft+π/6)
Amplitude
Time
Fig 3: cos(2πft-π/6)
Amplitude
Time