% EExxxx Project 1

% MATLAB code for xxxxxxxxxxxxx

% Your Name and Last Name

% Date

clc % Clear screen

clear % Clear all variables

A = 3; f= 1000; omega = 2\*pi\*f;

angle = degtorad(33); T=1/f;

t=linspace(-3\*T,3\*T,1000);

x\_t=3\*cos(omega\*t+angle);

subplot(3,1,1)

plot(t,x\_t, 'linewidth',2);grid on

subplot(3,1,2)

u\_t=heaviside(t);

plot(t,u\_t, 'linewidth',2);grid on

subplot(3,1,3)

plot(t,x\_t.\*u\_t, 'linewidth',2);grid on