```
%Plot4Waveforms.m
% input 4 waveforms & plot
% J.R.Andrews, KH6HTV, PSPL, 7 Sept 2009
disp('  ')
disp('Plot4Waveforms.m --- MatLab Program, J.R.Andrews, KH6HTV, PSPL,
9/7/09')
clear
disp('Note: All waveforms must have same time window and # of data points')
disp('Please use the keyboard to respond to the following questions.')
drive = input('Data in via drive A: or C:?  (1=A: 3=C:)   ');
if drive == 1
    disp('Data in will be as *.txt file via floppy disc in drive A:')
else
    disp('Data in will be as *.txt file in current C: drive directory')
end
disp(' ')
nwaves = input('Enter Number of Waveforms to be plotted (1 to 4 max)  ');
fname = input('Enter Data File Name #1 =   ','s');
if drive == 1
    dname = ['A:', fname, '.txt'];
else
    dname = [fname, '.txt'];
end
v1 = load(dname);
if nwaves > 1
fname = input('Enter Data File Name #2 =   ','s');
if drive == 1
    dname = ['A:', fname, '.txt'];
else
    dname = [fname, '.txt'];
end
v2 = load(dname);
end
if nwaves > 2
fname = input('Enter Data File Name #3 =   ','s');
if drive == 1
    dname = ['A:', fname, '.txt'];
else
    dname = [fname, '.txt'];
end
v3 = load(dname);
end
if nwaves == 4
fname = input('Enter Data File Name #4 =   ','s');
if drive == 1
    dname = ['A:', fname, '.txt'];
```

```
else
    dname = [fname, '.txt'];
end
v4 = load(dname);
end
Tw = input('Time Window in NanoSeconds (ns)?  ');
N = length(v1);  % = # of data points
dt=Tw/N; % (in ns)
for i=1:N
    t(i)=(i-1)*dt;
end
if nwaves == 1
plot(t,v1,'b')
grid
title('plot of waveform')
xlabel('time in ns')
ylabel('Volts')
end
if nwaves == 2
plot(t,v1,'b',t,v2,'g')
grid
title('plot of 2 waveforms #1=blue, #2=green')
xlabel('time in ns')
ylabel('Volts')
end
if nwaves == 3
plot(t,v1,'b',t,v2,'g',t,v3,'r')
grid
title('plot of 3 waveforms #1=blue, #2=green, #3=red')
xlabel('time in ns')
ylabel('Volts')
end
if nwaves == 4
plot(t,v1,'b',t,v2,'g',t,v3,'r',t,v4,'k')
grid
title('plot of 4 waveforms #1=blue, #2=green, #3=red, #4=black')
xlabel('time in ns')
ylabel('Volts')
end
disp('end of Plot4Waveforms.m program')
```