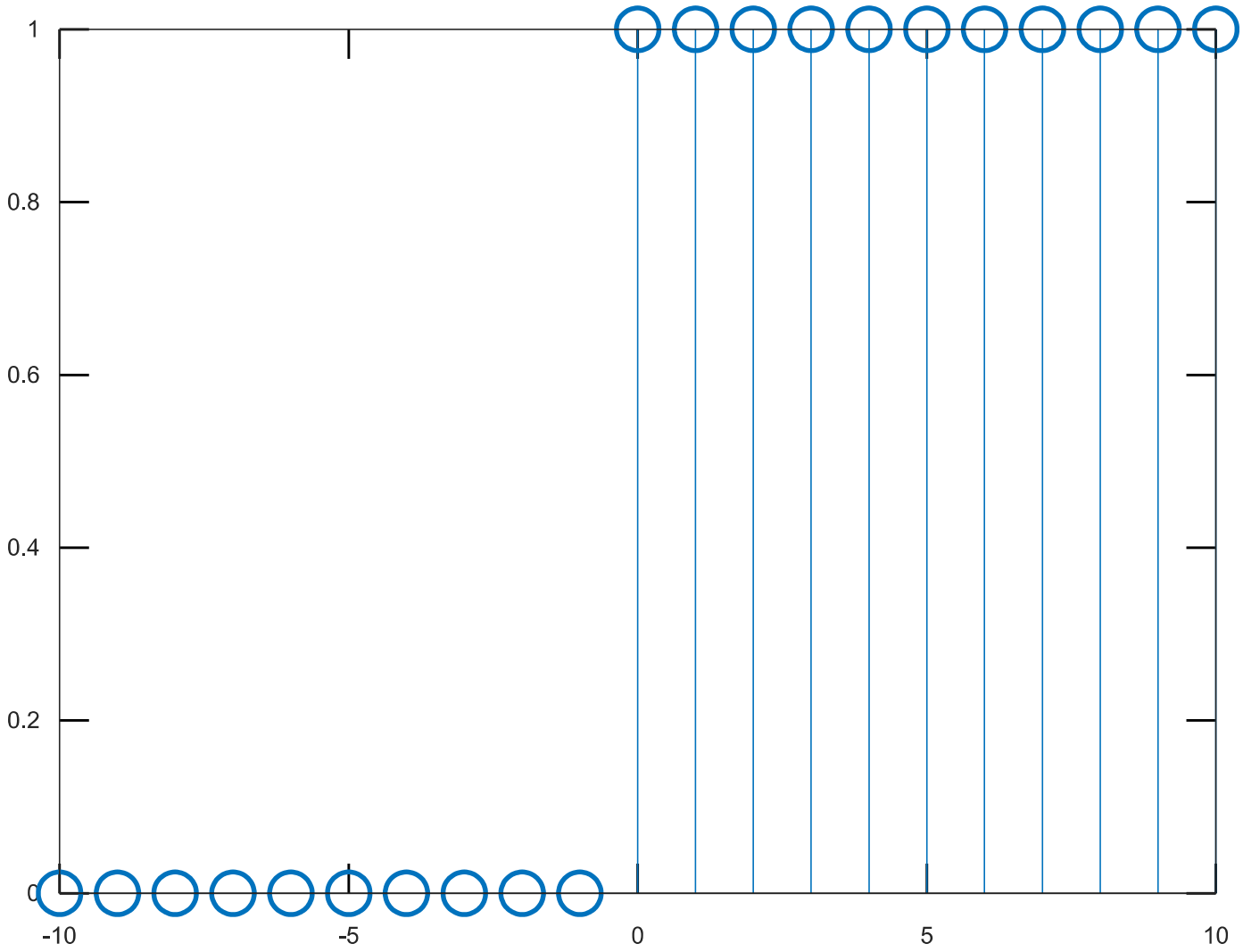
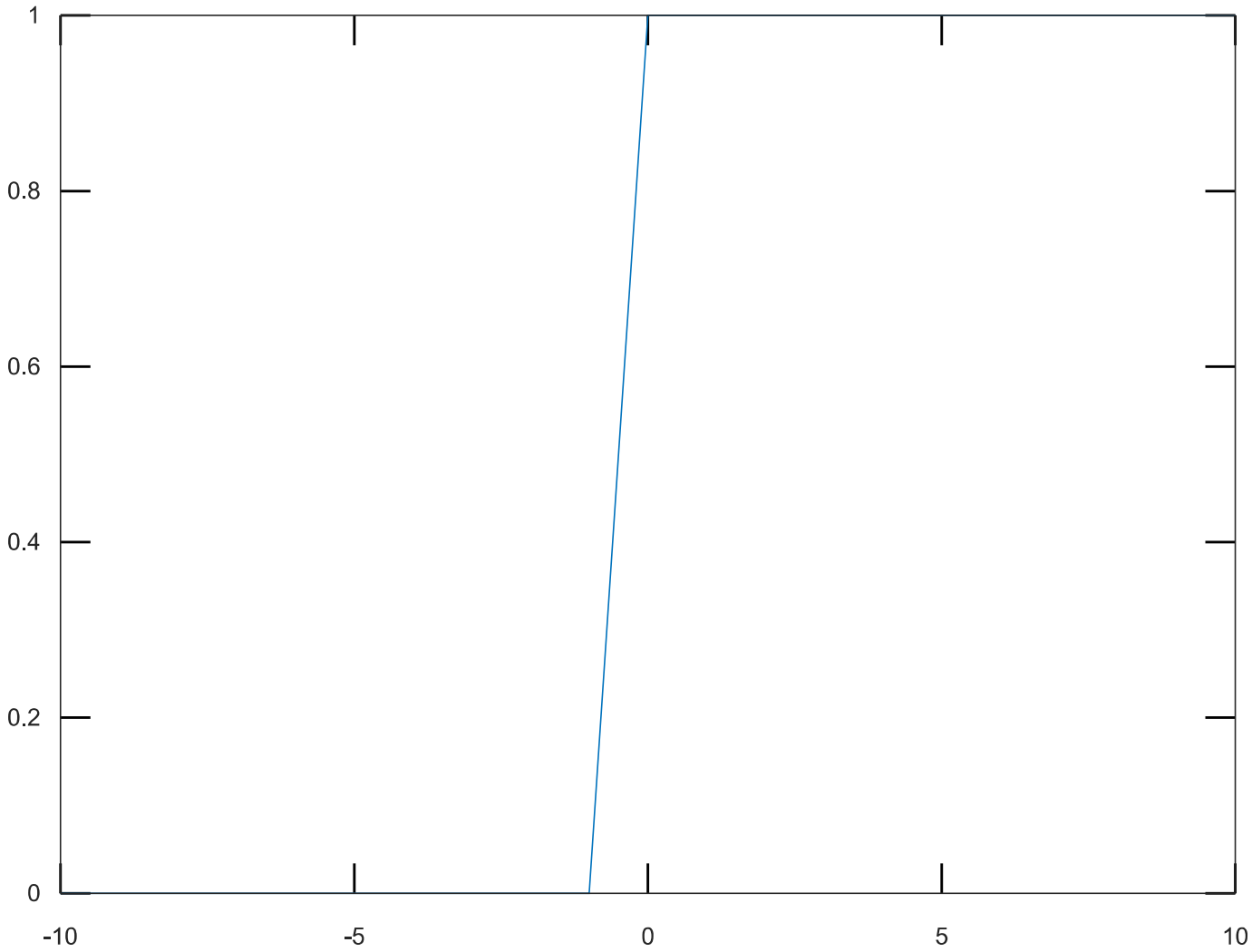
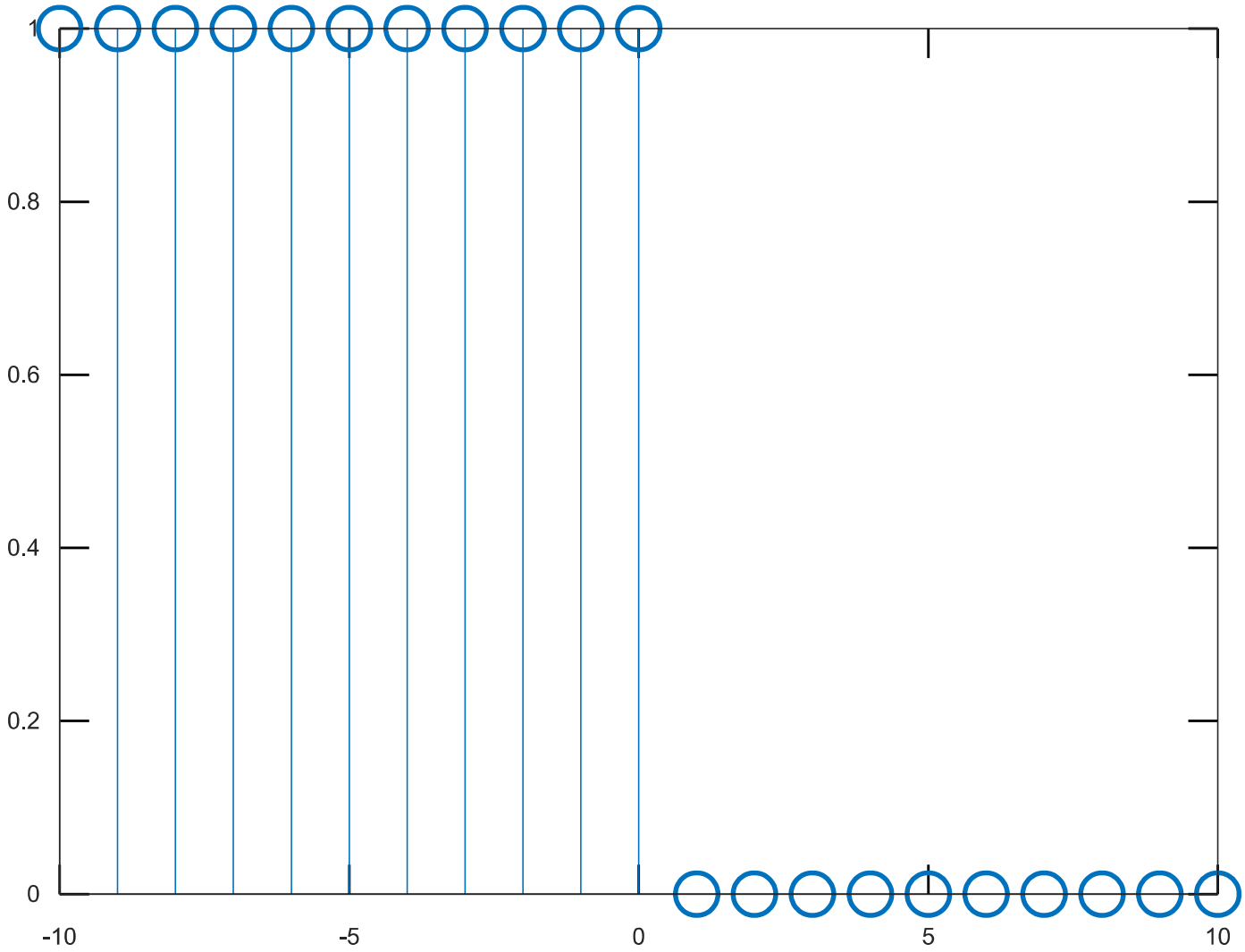
Octave Online

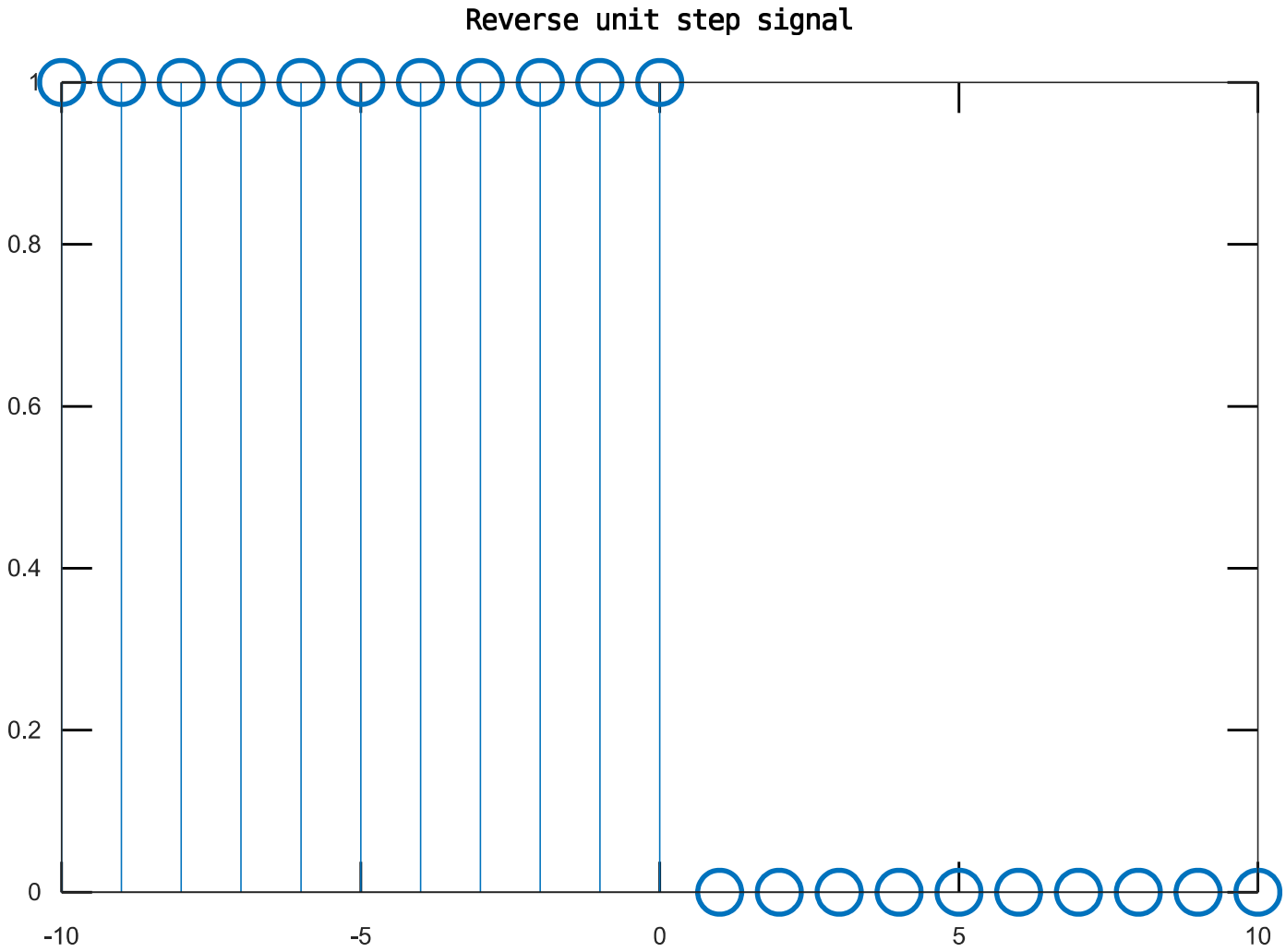
```
octave:1> #even component of a signal
#xet=(xt+x(-t))/2
#Xot=xt-x(-t))/2
octave:1> #unit step signal
t=-10:10;
ut=[zeros(1,10),ones(1,11)];
stem(t,ut);
plot(t,ut);
```



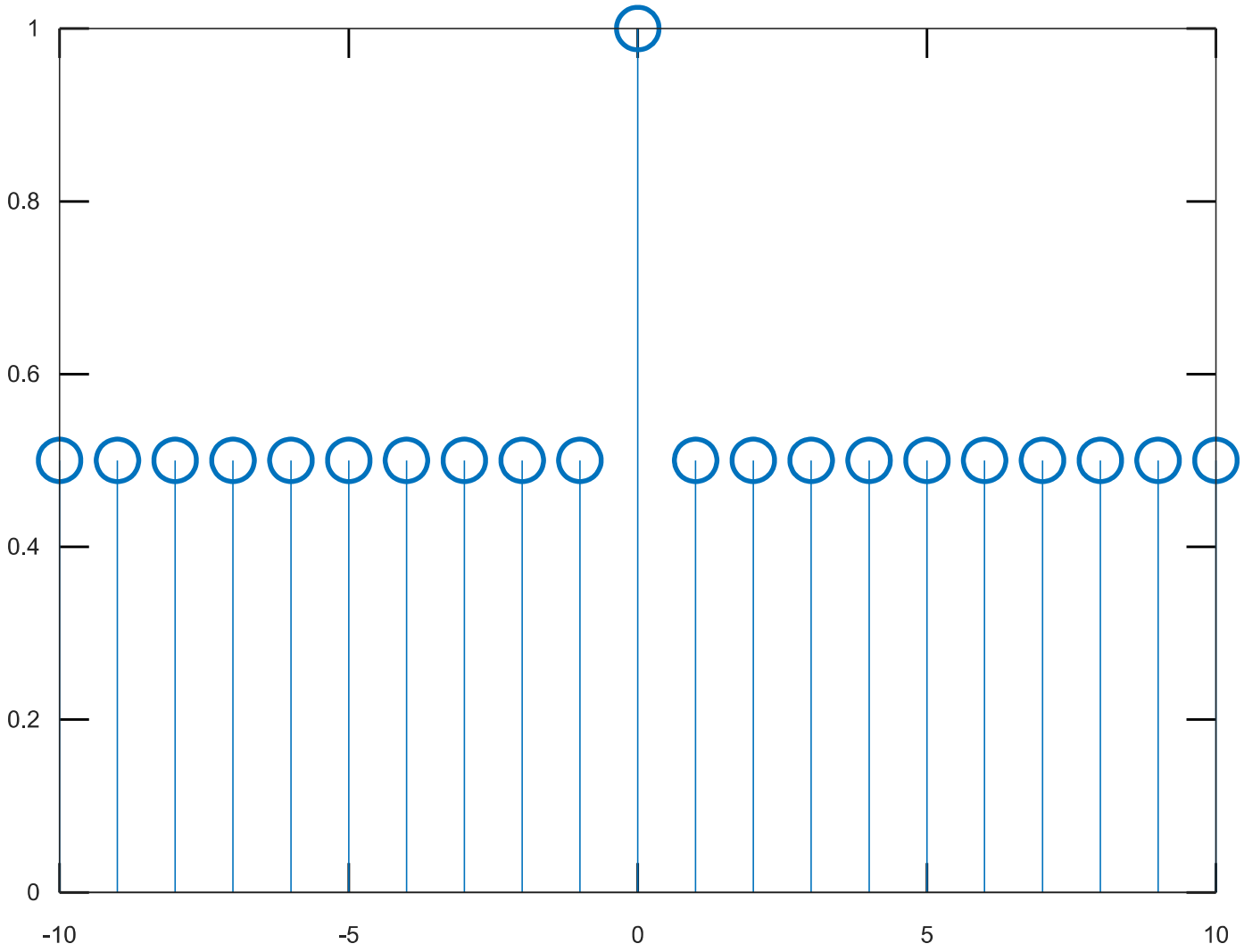


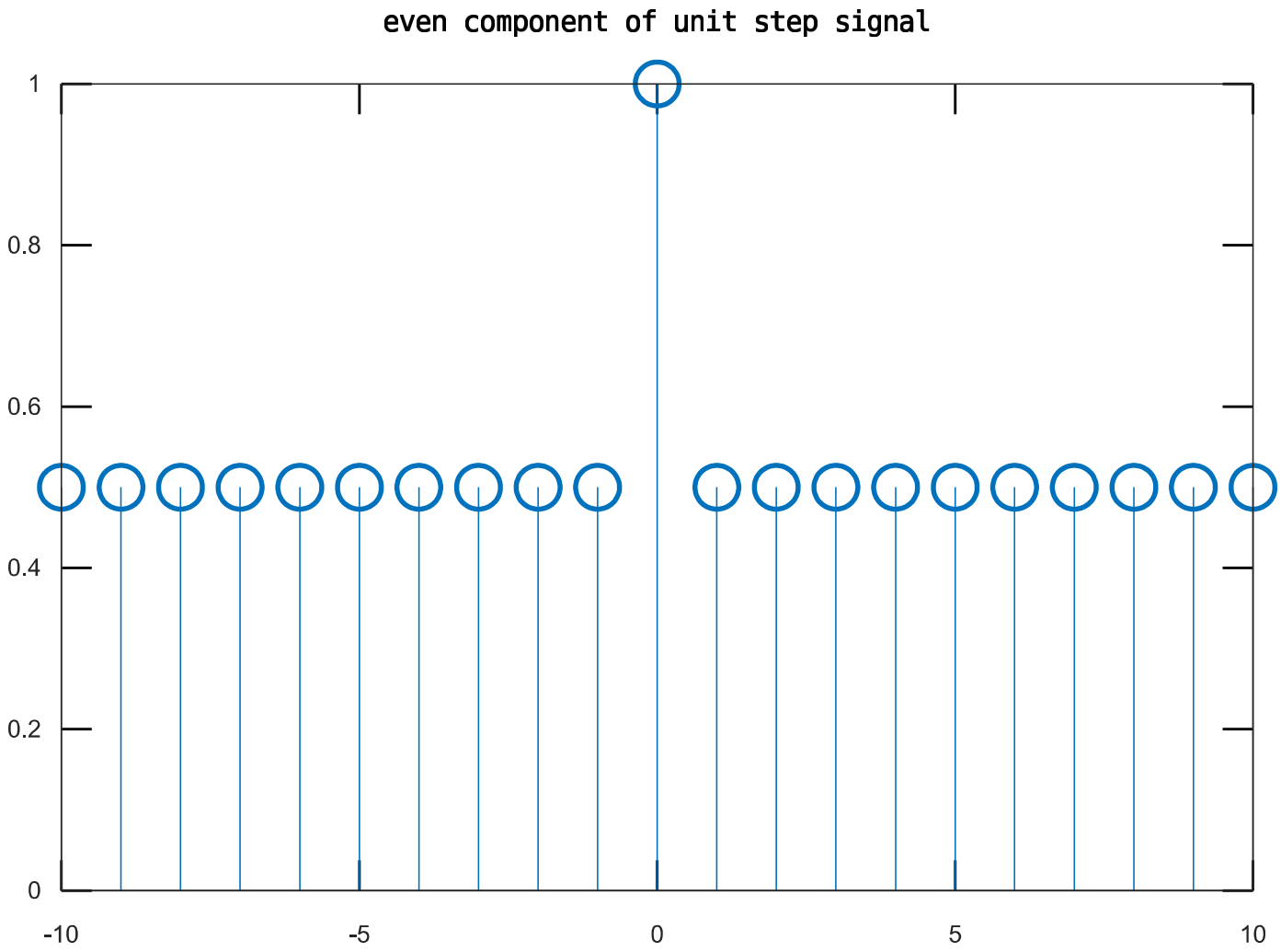

```
octave:5> u_reverse=fliplr(ut);
stem(t,u_reverse);
title("Reverse unit step signal");
```


1
0.8
0.6
0.4
0.2
0
-10
-5
0
5
10

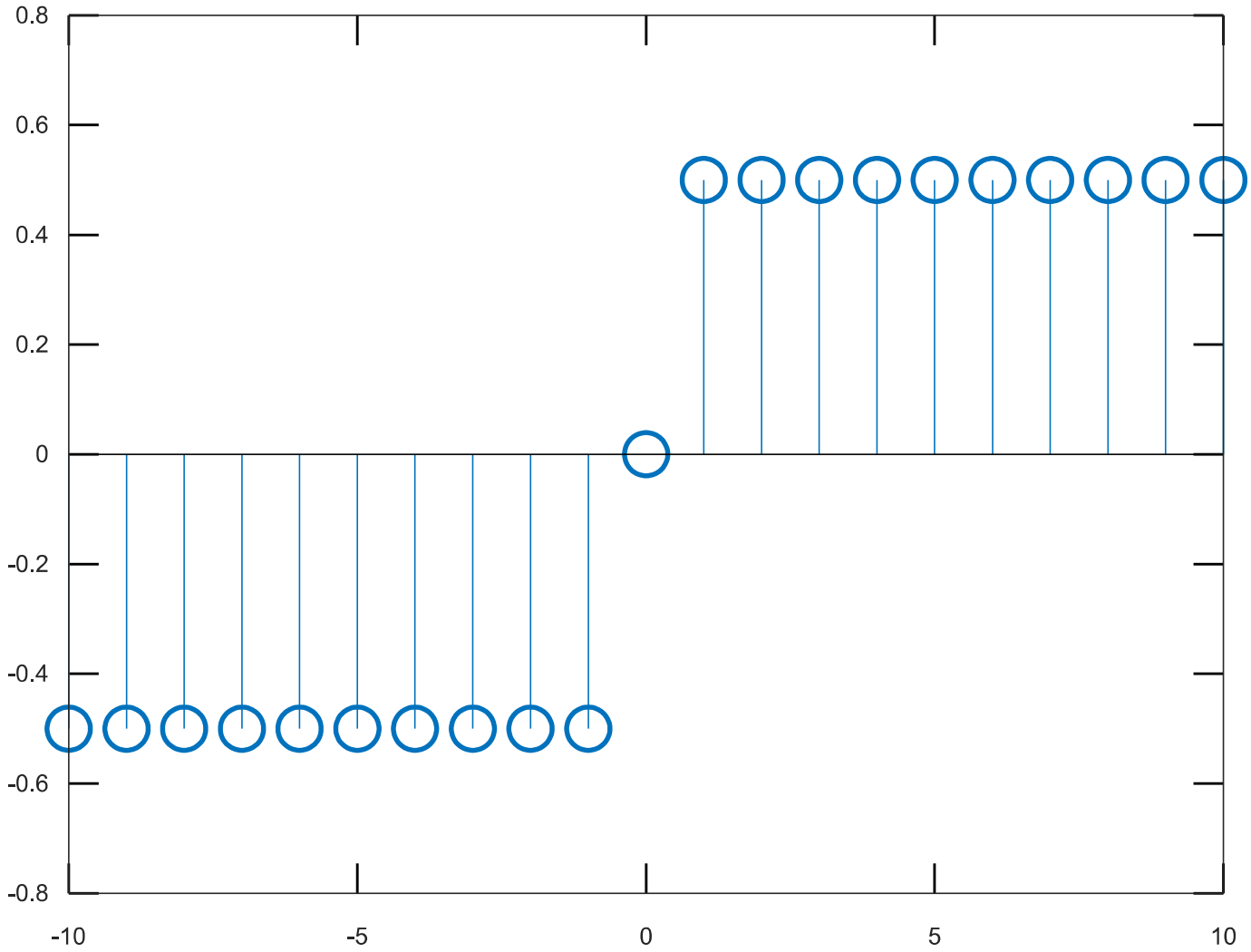


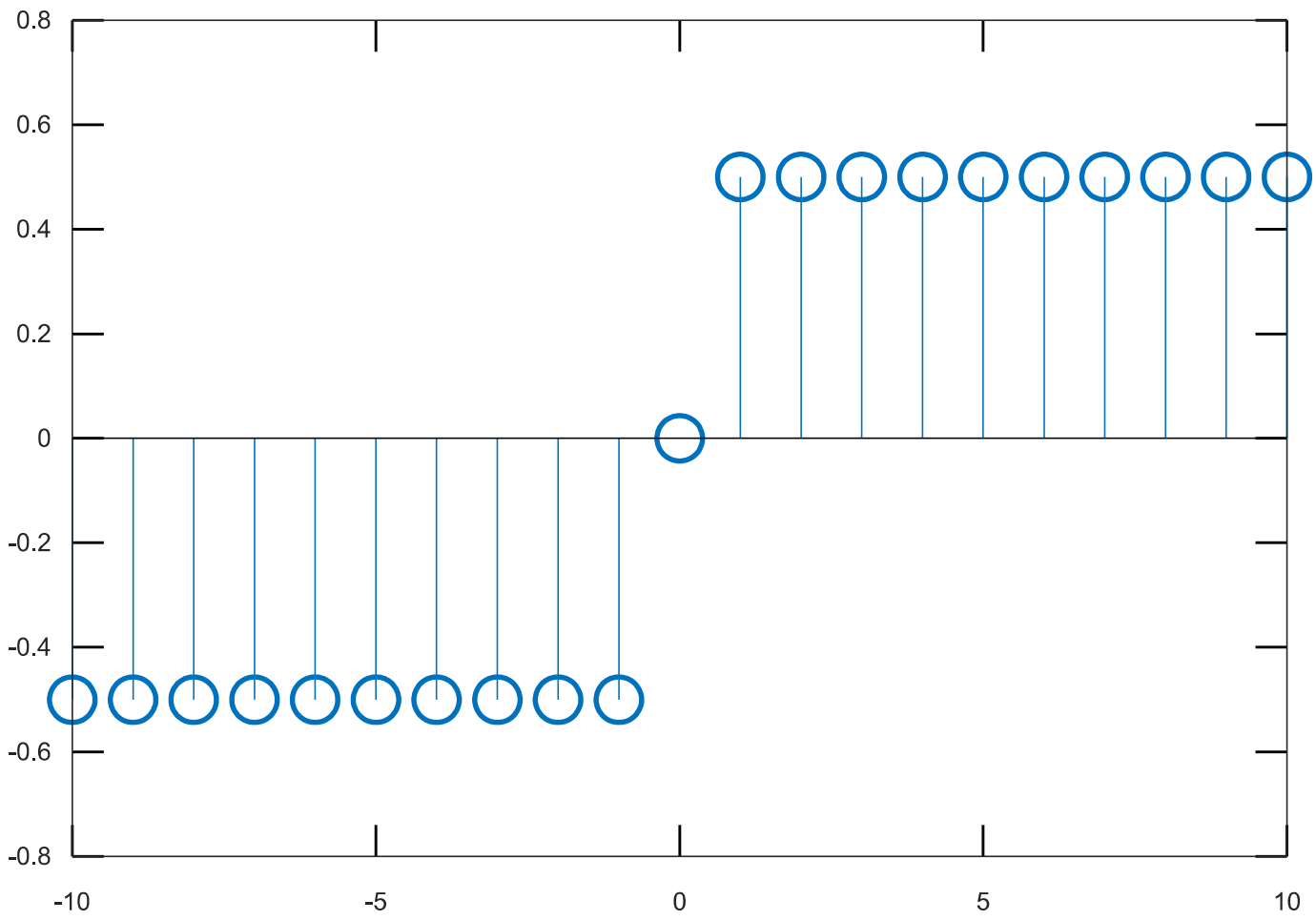

```
octave:8> #even component of unit step signal
u_et=0.5*(ut+u_reverse);
stem(t,u_et);
title("even component of unit step signal");
```


1
0.8
0.6
0.4
0.2
0
-10
-5
0
5
10

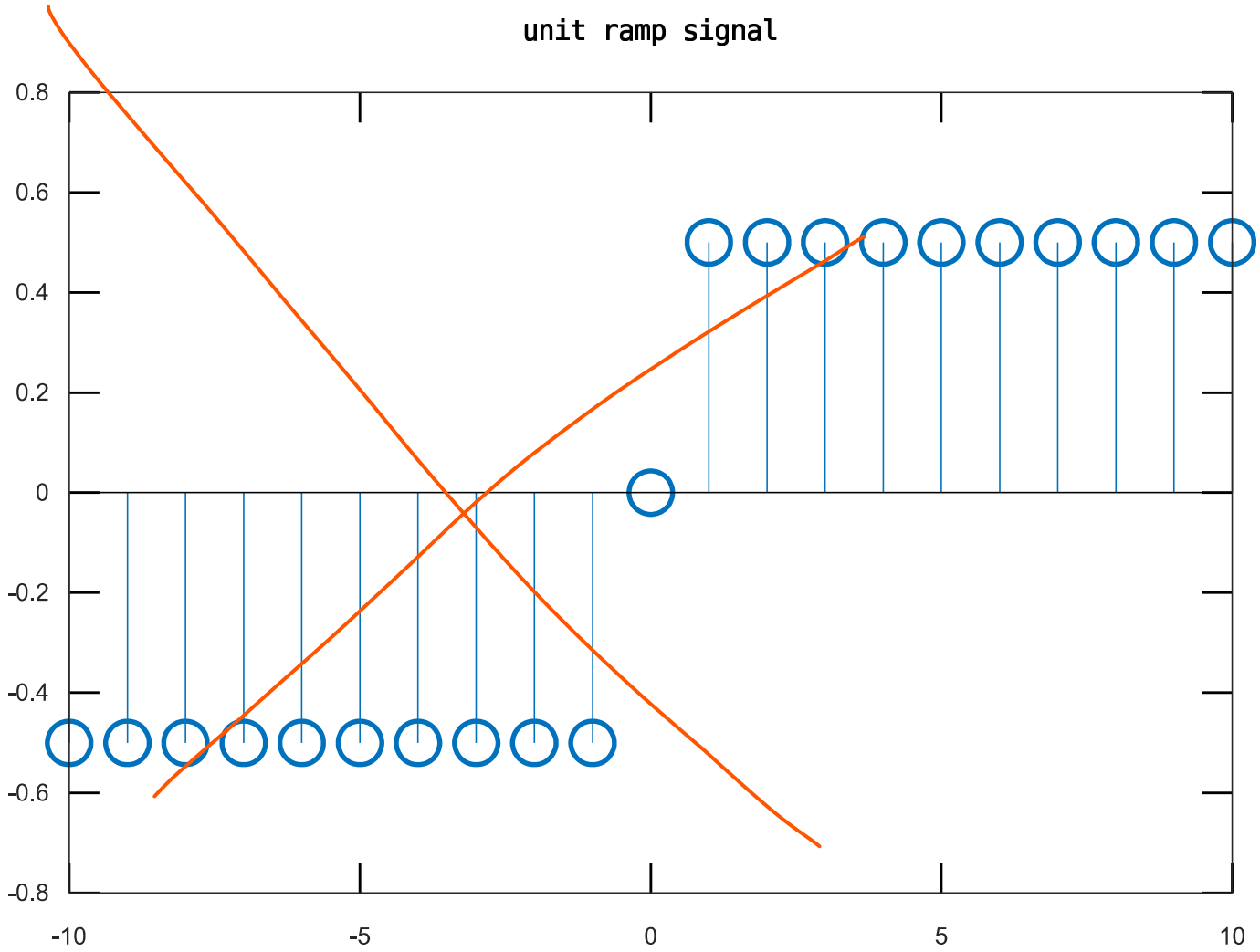



```
octave:11> #odd component of unit step signal
u_ot=0.5*(ut-u_reverse);
stem(t,u_ot);
title("odd component of unit step signal");
```

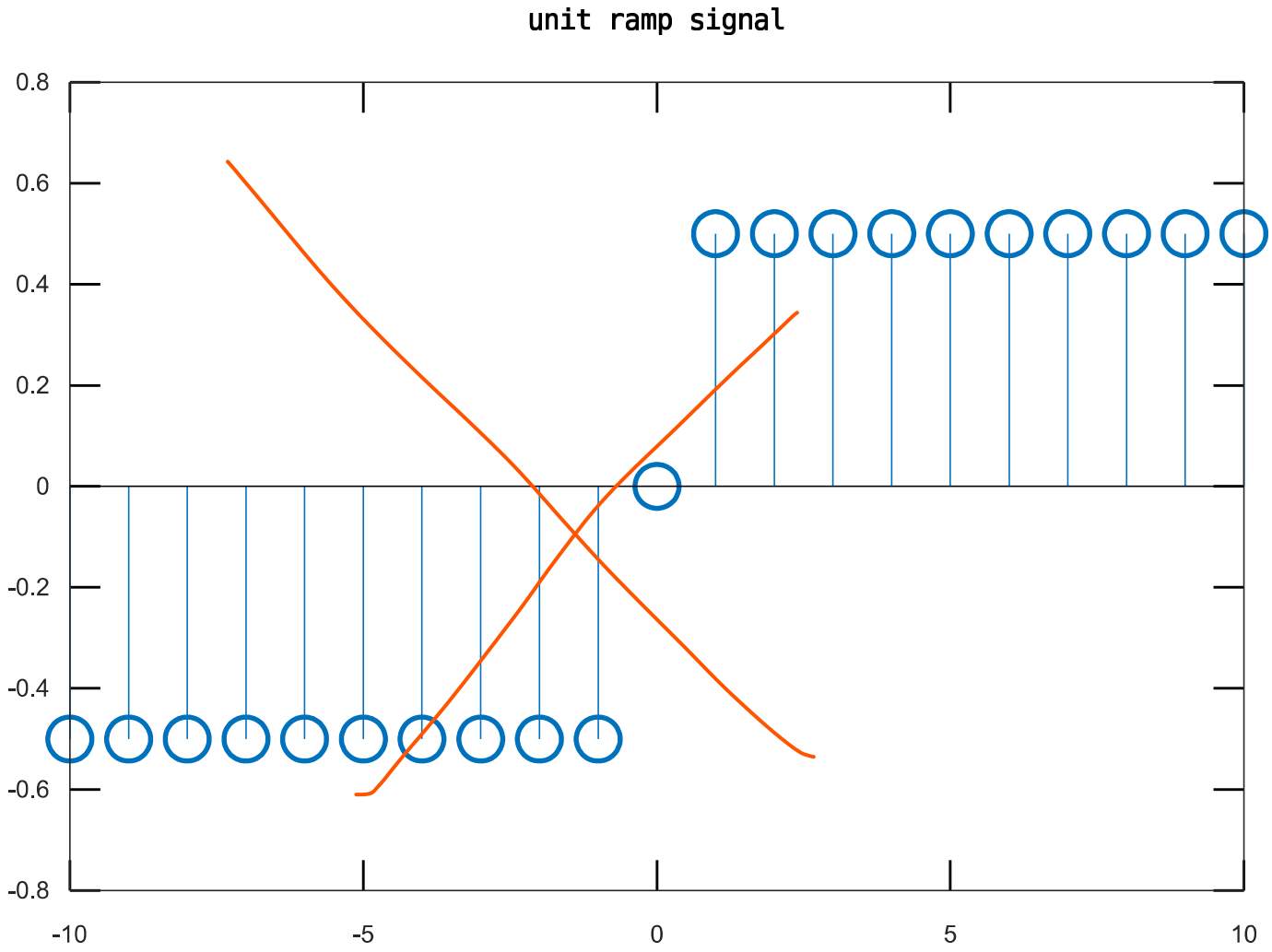

0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-10
-5
0
5
10



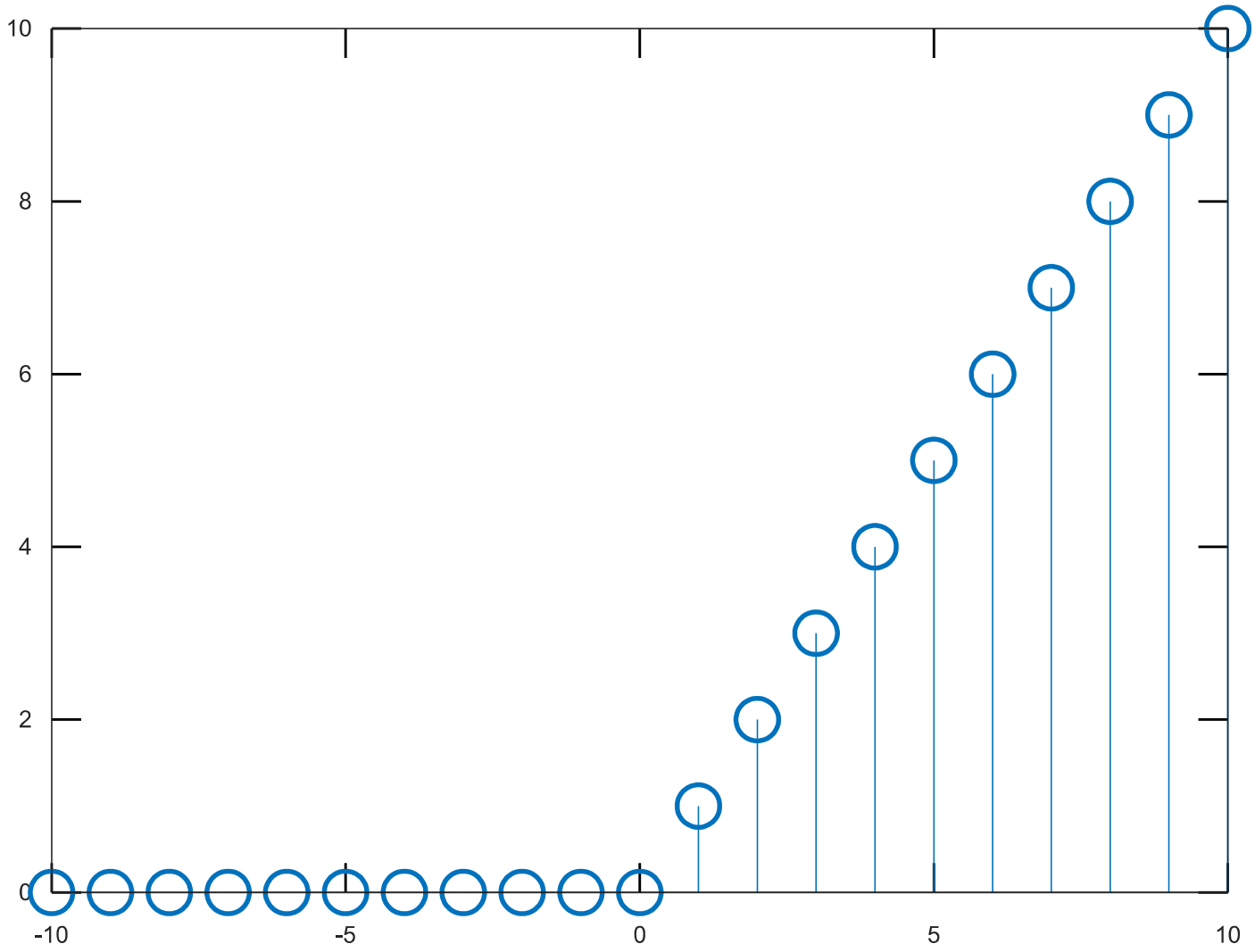

```
octave:14> #unit ramp signal
t=-10:10;
rt=[zeros(1,10),ones(1,11)]*t;
stem(t,rt);
plot(t,rt);
title("unit ramp signal");
error: operator *: nonconformant arguments (op1 is 1x21, op2 is 1x21)
error: 'rt' undefined near line 1, column 8
error: 'rt' undefined near line 1, column 8
```

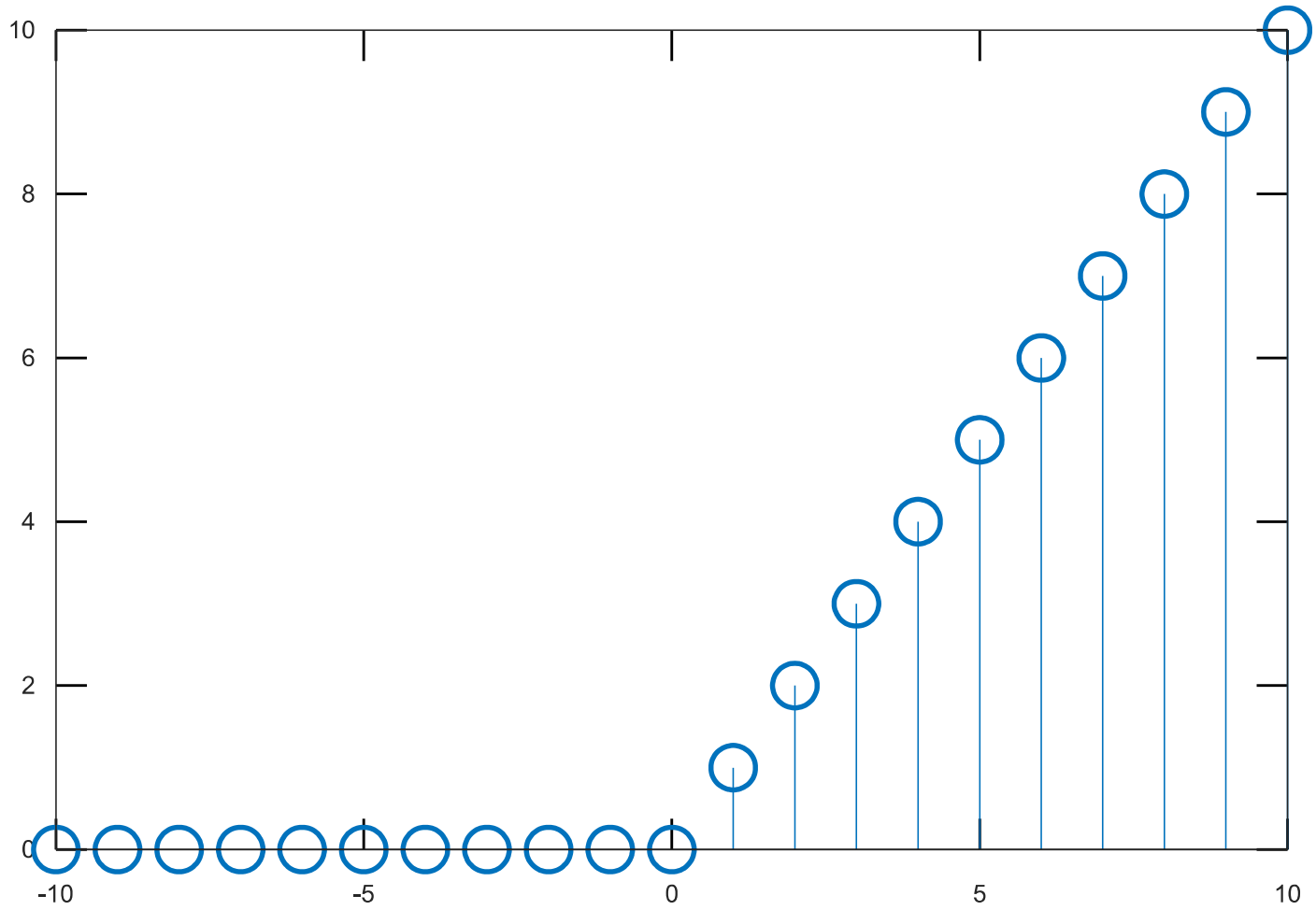



```
octave:19> #unit ramp signal
rt=rt.*t;
stem(t,rt);
title("unit ramp signal");
error: 'rt' undefined near line 1, column 4
error: 'rt' undefined near line 1, column 8
```

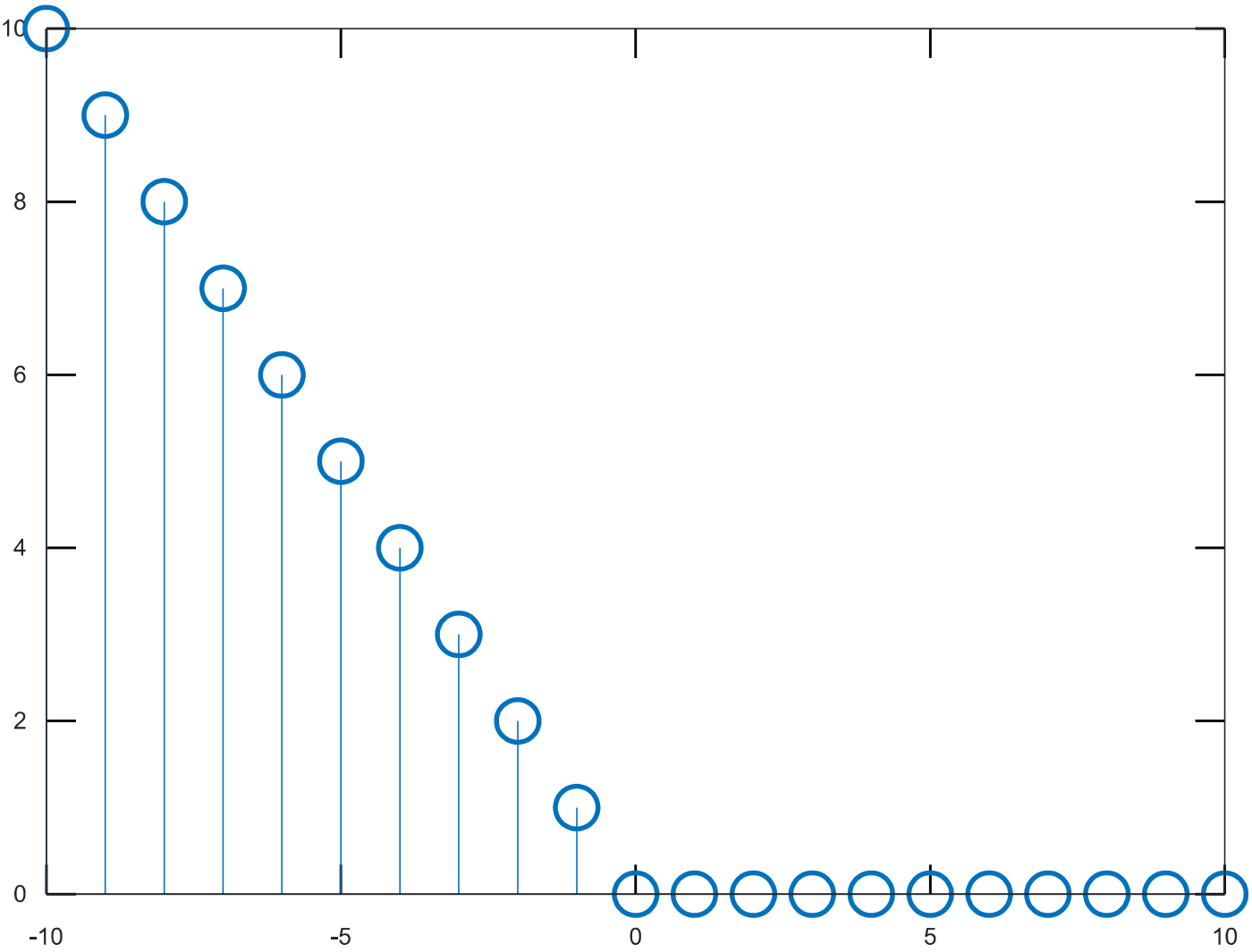


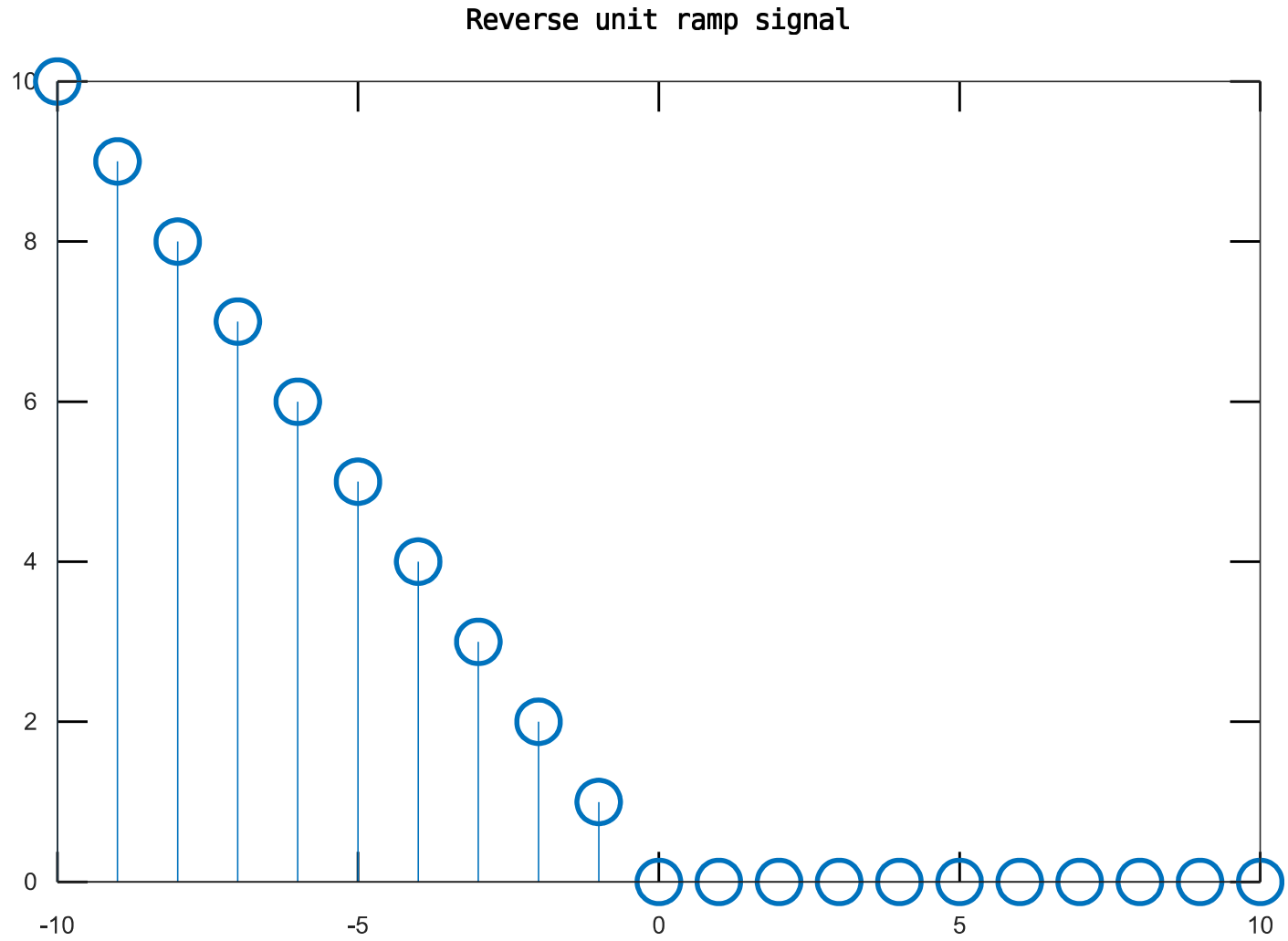

```
octave:22>  #unit ramp signal
rt=ut.*t;
stem(t,rt);
title("unit ramp signal");
```


10
8
6
4
2
0
-10
-5
0
5
10

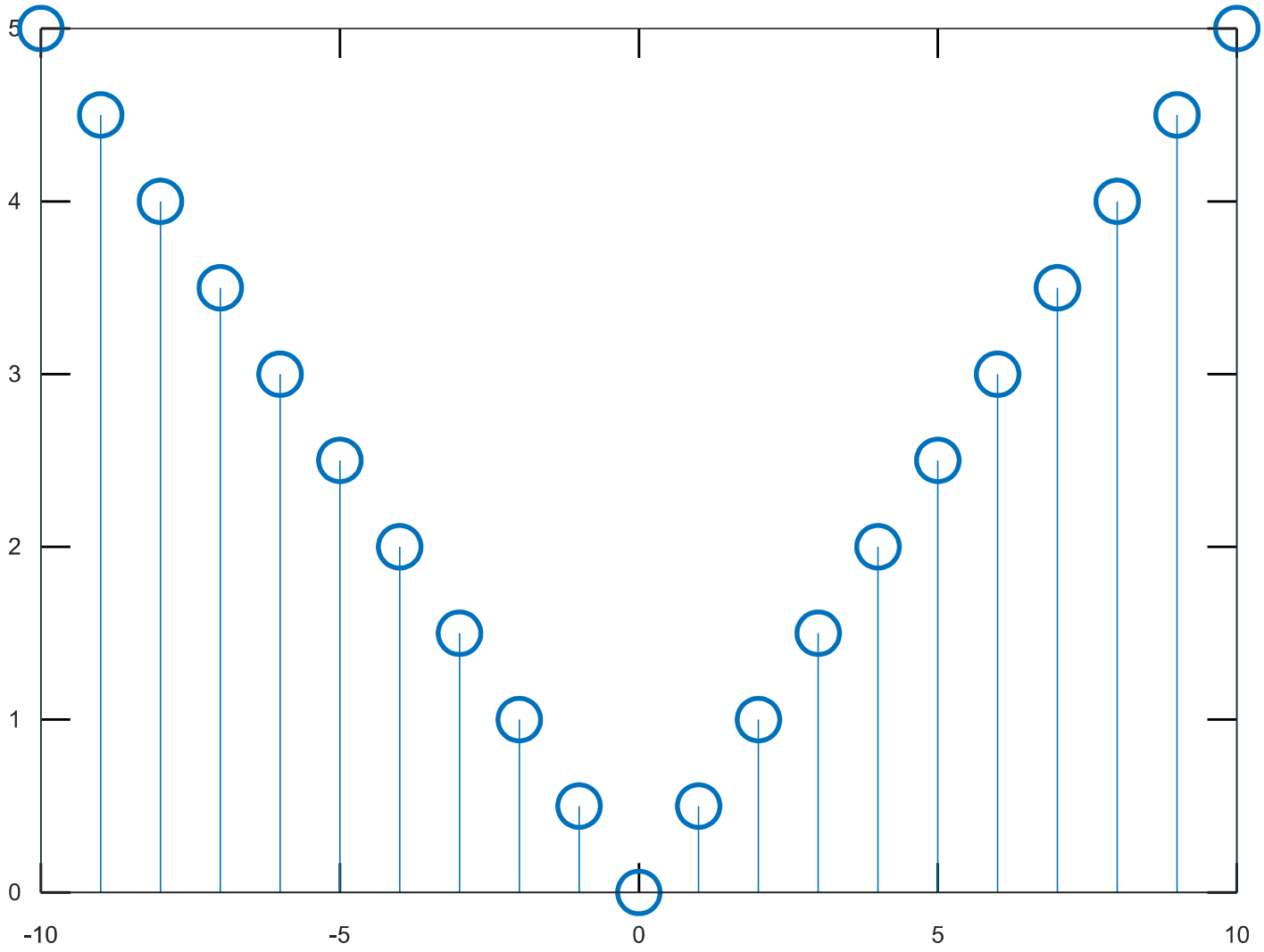


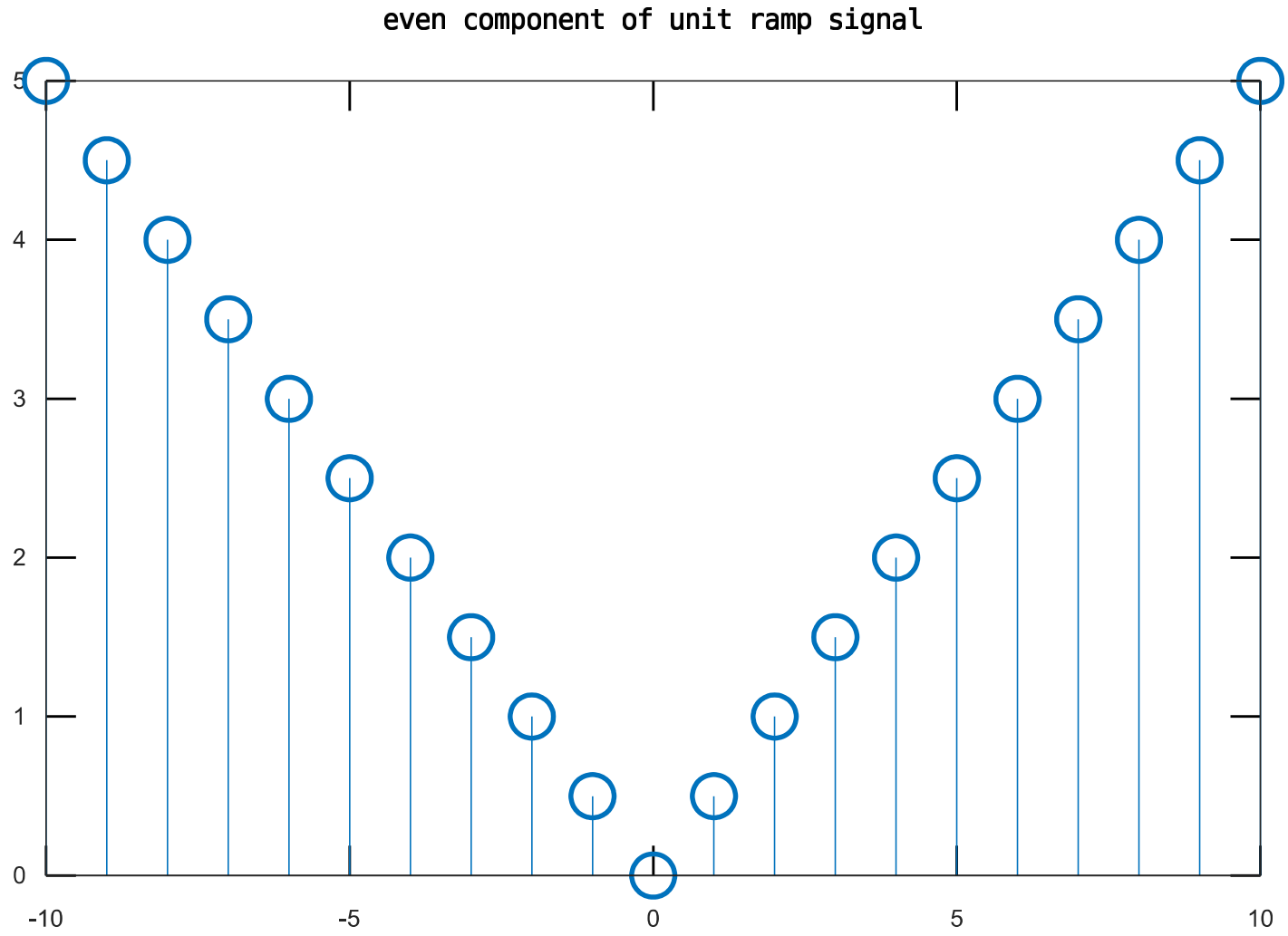

```
octave:25> r_reverse=fliplr(rt);
stem(t,r_reverse);
title("Reverse unit ramp signal");
```


10
8
6
4
2
0
-10
-5
0
5
10

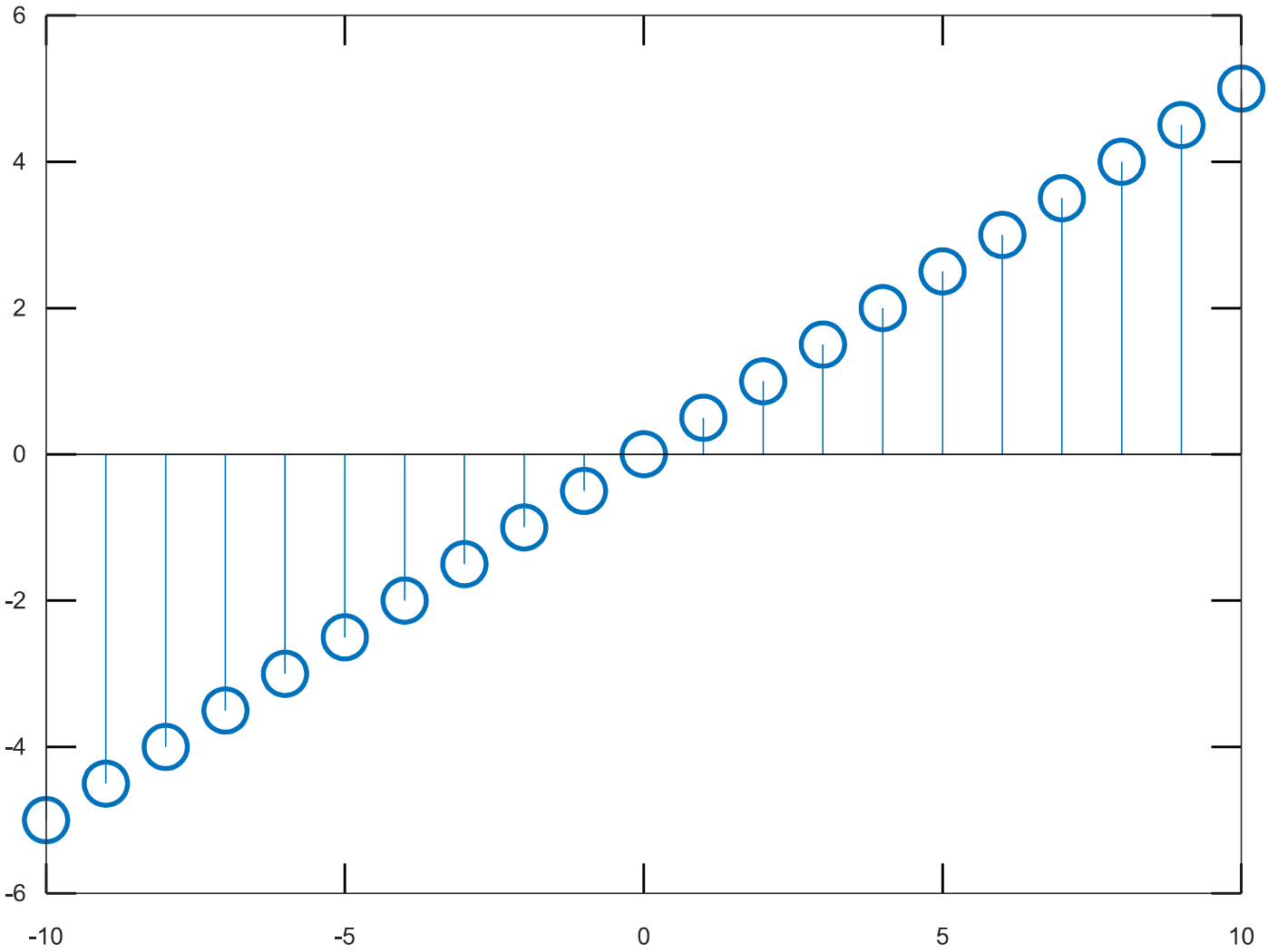


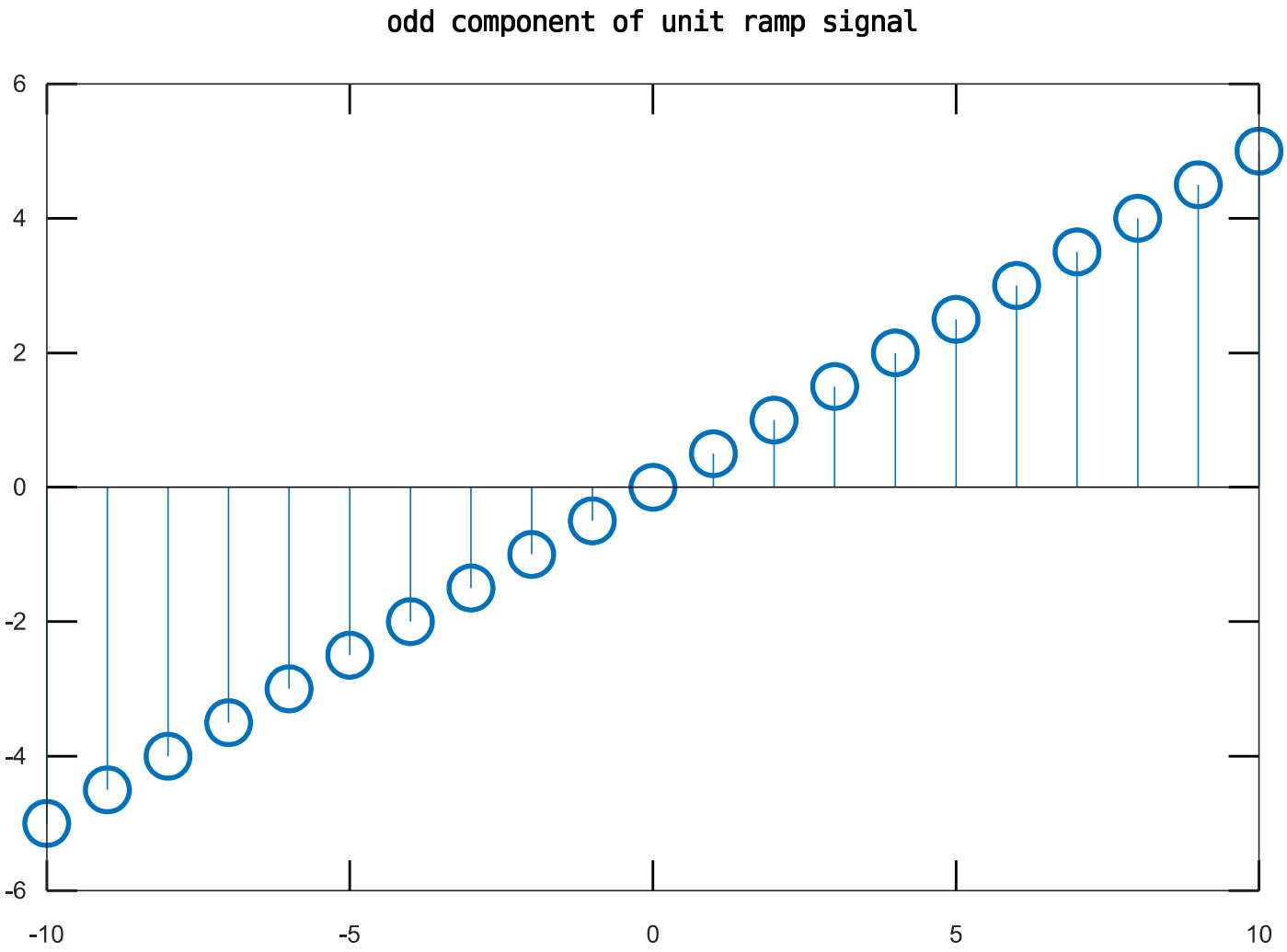

```
octave:28> #even component of unit ramp signal
r_et=0.5*(rt+r_reverse);
stem(t,r_et);
title("even component of unit ramp signal");
```


5
4
3
2
1
0
-10
-5
0
5
10



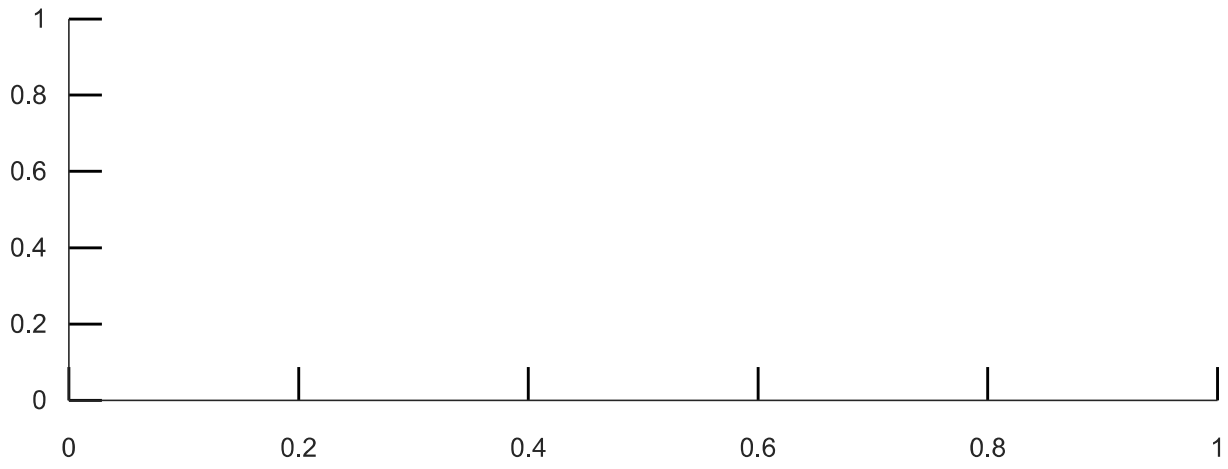

```
octave:31> #odd component of unit rampp signal
r_ot=0.5*(rt-r_reverse);
stem(t,r_ot);
title("odd component of unit ramp signal");
```

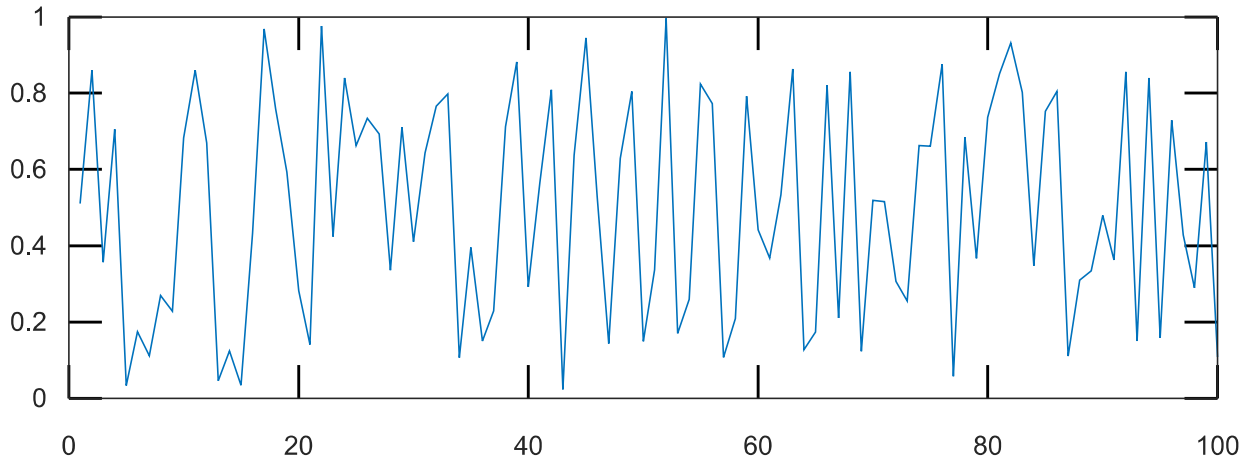

6
4
2
0
-2
-4
-6
-10
-5
0
5
10

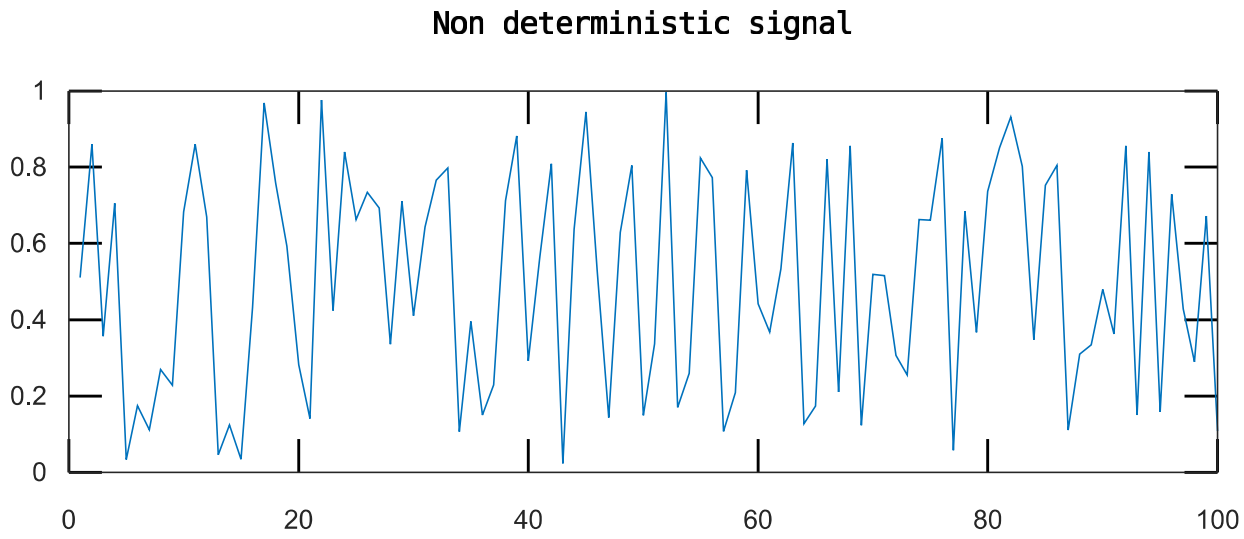


NOTICE: Due to inactivity, your session will expire in five minutes.
Octave Exited. Message: Session Timeout

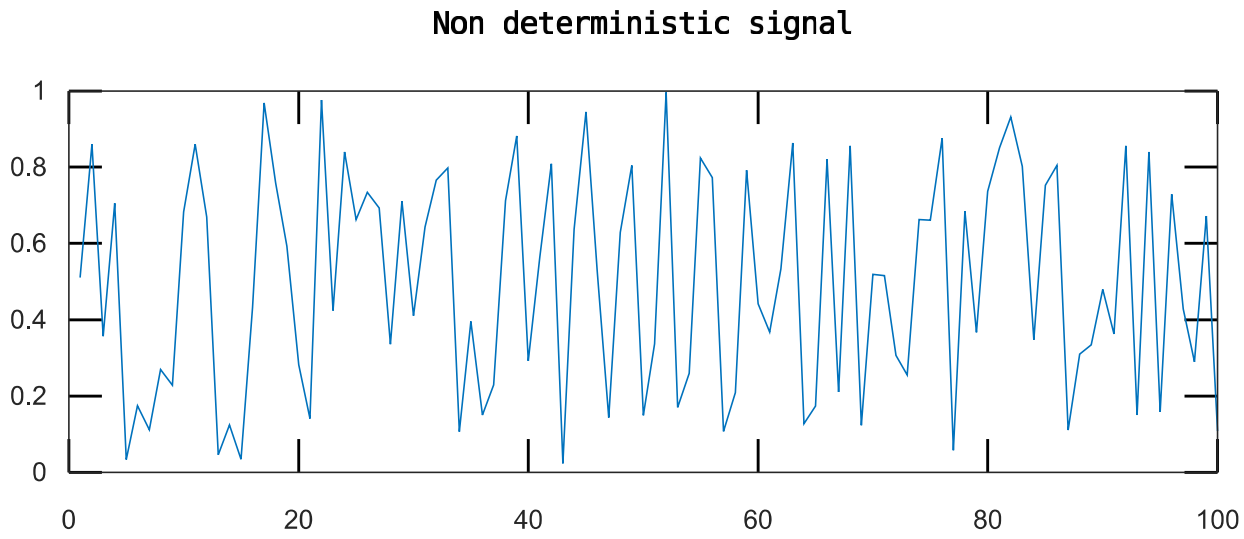
```
octave:1> #Non Deterministic Signal
# sinusoidal signal
x=rand(1,100);
subplot(2,1,2 );
plot(x);
title("Non deterministic signal");
```

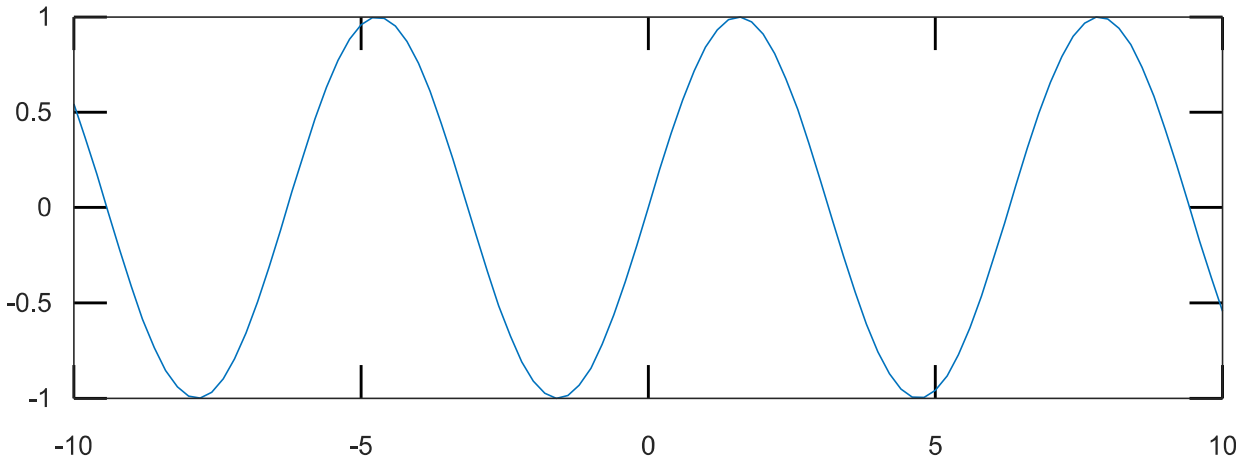

1
0.8
0.6
0.4
0.2
0
0
0.2
0.4
0.6
0.8
1

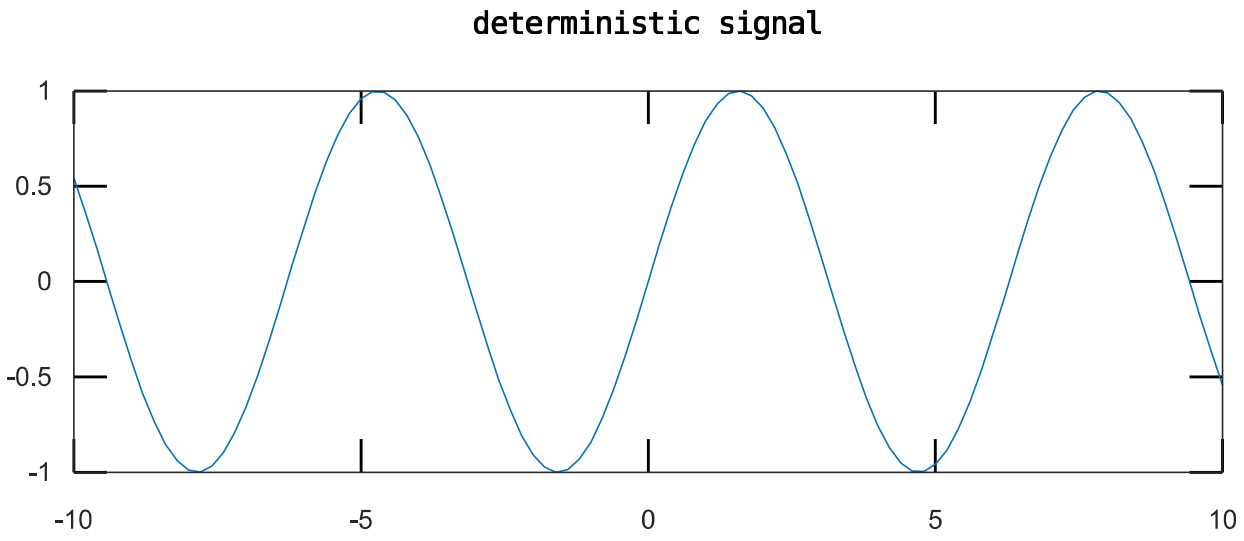

1
0.8
0.6
0.4
0.2
0
0
20
40
60
80
100




```
octave:5> #Deterministic Signal
# sinusoidal signal
t=-10:0.2:10;
xt=sin(t);
subplot(2,1,2 );
plot(t,xt);
title("deterministic signal");
```


Non deterministic signal
1
0.8
0.6
0.4
0.2
0
0
20
40
60
80
100


1
0.5
0
-0.5
-1
-10
-5
0
5
10


deterministic signal
1
0.5
0
-0.5
-1
-10
-5
0
5
10