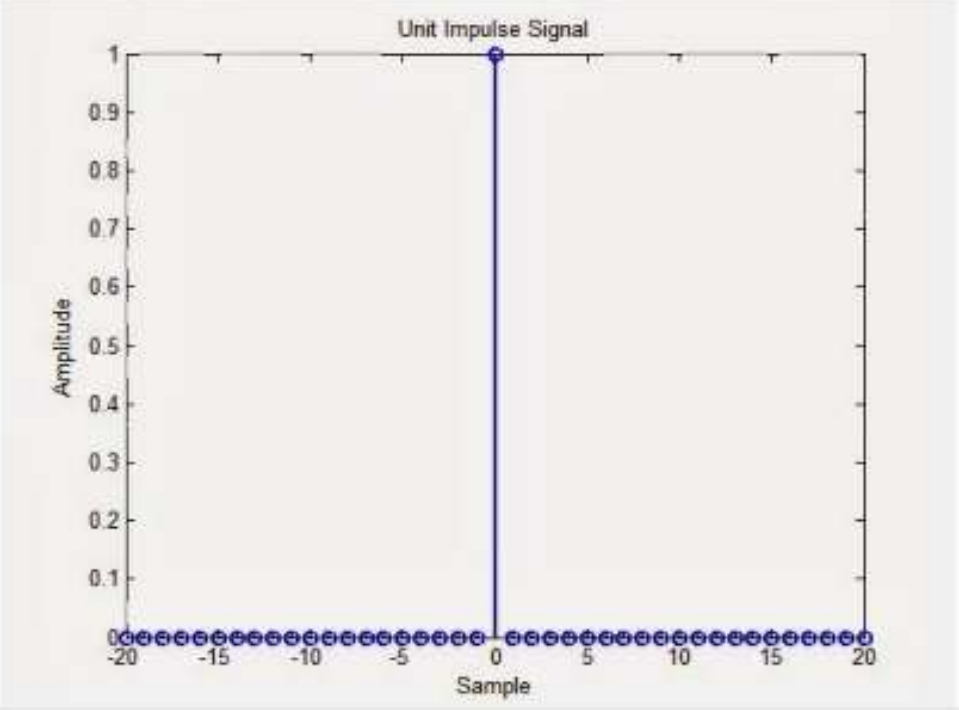
BAHAN PRAKTIKUM
Rabu, 14 Mei 2025

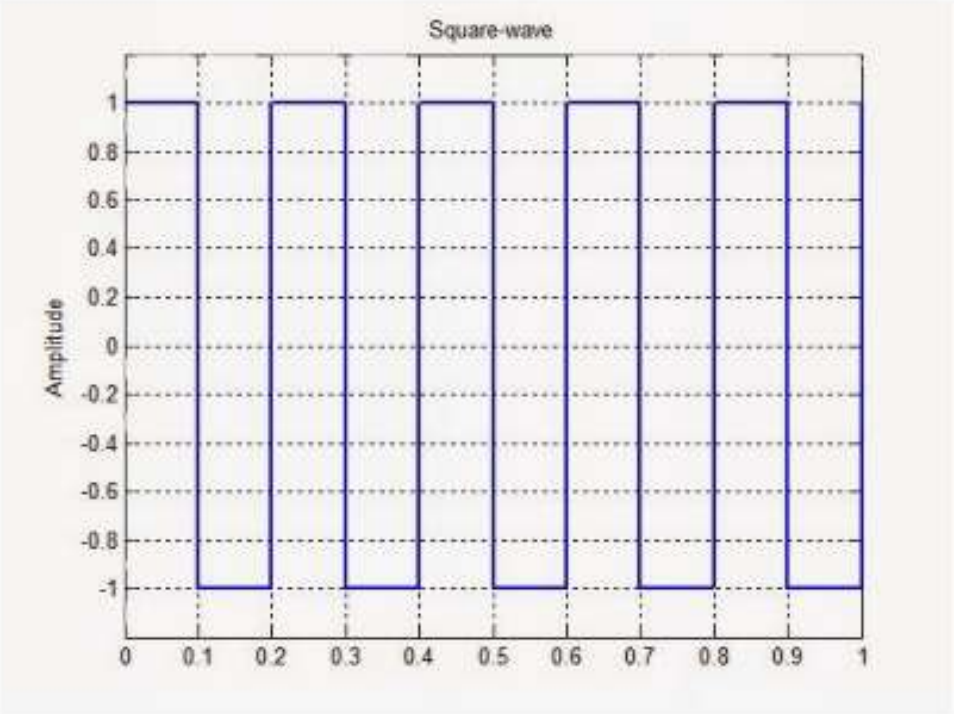
IMPULSE SIGNAL

```
clc;
clear all;
close all;
n=-20:20; % specify index n
delta=(n==0);        % define the delta sequence
stem(n,delta,'LineWidth',2) % plot the delta sequence
xlabel('Sample');
ylabel('Amplitude');
title('Unit Impulse Signal');
```



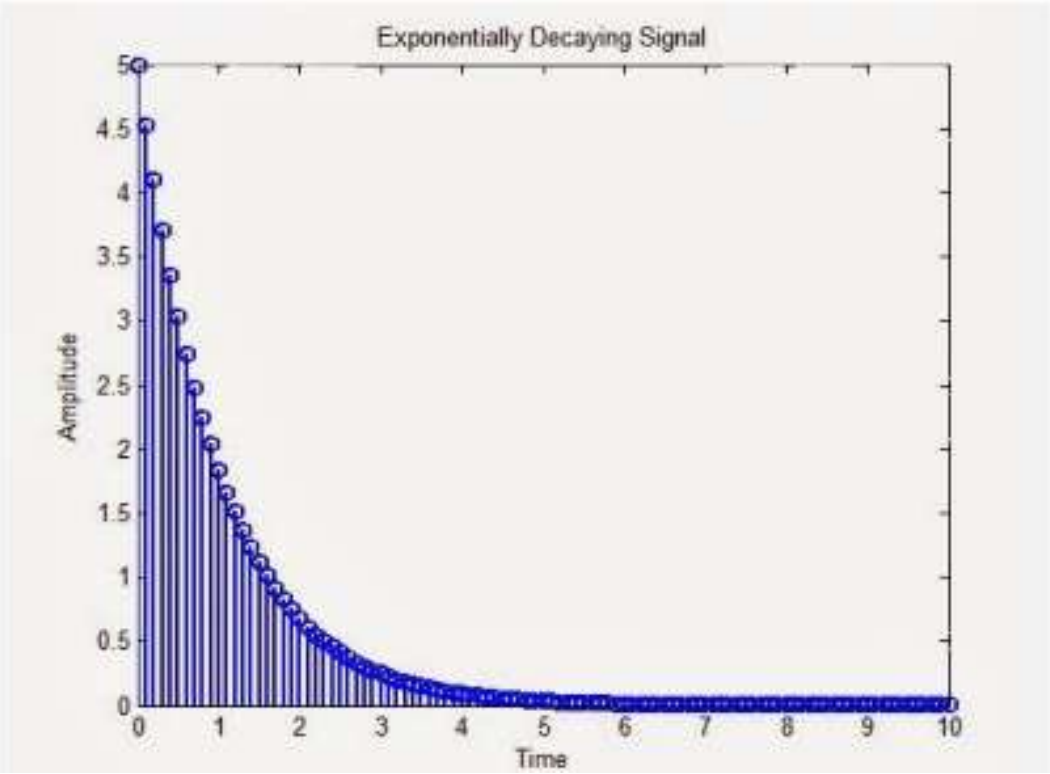
SQUARE WAVE

```
t=(0:0.001:1) % time base
x=square(2*pi*5*t); % squarewave generator
plot(t,x,'LineWidth',2);grid % plot squarewave
axis([0 1 -1.2 1.2]); % scale axes
title('Square-wave') % add title
ylabel('Amplitude'); % label
```



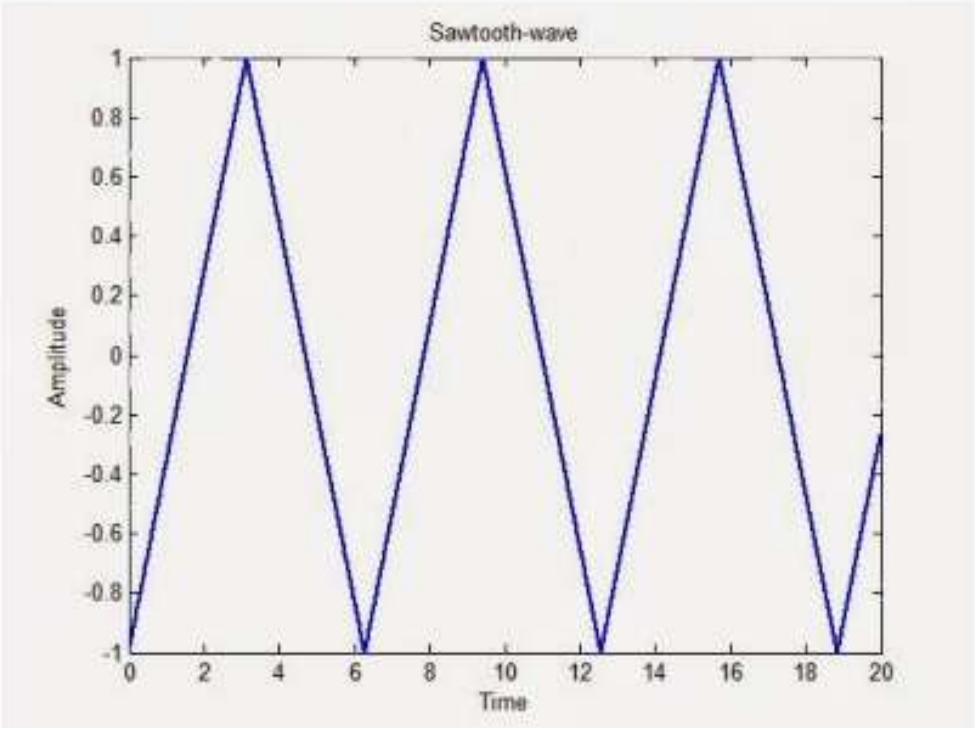
EXPONENTIALLY DECAYING SIGNAL

```
N=10; %Number of samples
A=5;  %Maximum Amplitude
t=0:0.1:N;
x=A*exp(-t);
figure,stem(t,x,'LineWidth',2);
xlabel('Time');
ylabel('Amplitude');
title('Exponentially Decaying Signal');
```



TRIANGULAR WAVE

```
clc;clear all;
N=20; % number of samples
x=0:0.1/N:20;
tri=sawtooth(x,0.5); % width=0.5 for Triangular signal
plot(x,tri,'LineWidth',2);% plot sawtooth wave
title('Sawtooth-wave') % add title
ylabel('Amplitude') % label the vertical axis
xlabel('Time') % label the horizontal axis
```



RAMP SIGNAL

```
n=-10:10; % define index n
ramp=n.*(n>=0); % define a ramp
stem(n,ramp, 'filled')
xlabel('Sample');
ylabel('Amplitude');
title('Ramp Signal');
```