```matlab
%group1
%J. Premchand-1704048
%Harshit-1704047
%S.S Shanmukkha-1704049
%Sumit -1704050
%PAM signal
clc,clear,close all;
a = 1;
f = 5;
t = 0:0.02:2;                      % for a total of 16 samples
x1 = 1;                            %generation of an impulse signal
x2 = a*sin(2*pi*f*t);         %generation of sine wave
y = x1.*x2;                      %modulation step
subplot(3,1,1);                  %for impulse signal plot
stem(x1);
title('Impulse Signal');
xlabel('Time');
ylabel('Amplitude ');
subplot(3,1,2)                     %for sine wave plot
plot(t,x2);
title('Sine Wave');
xlabel('Time ');
ylabel('Amplitude ');
subplot(3,1,3)                       %for PAM wave plot
stem(t,y,'.');
title('PAM Wave');
xlabel('Time');
ylabel('Amplitude');
```
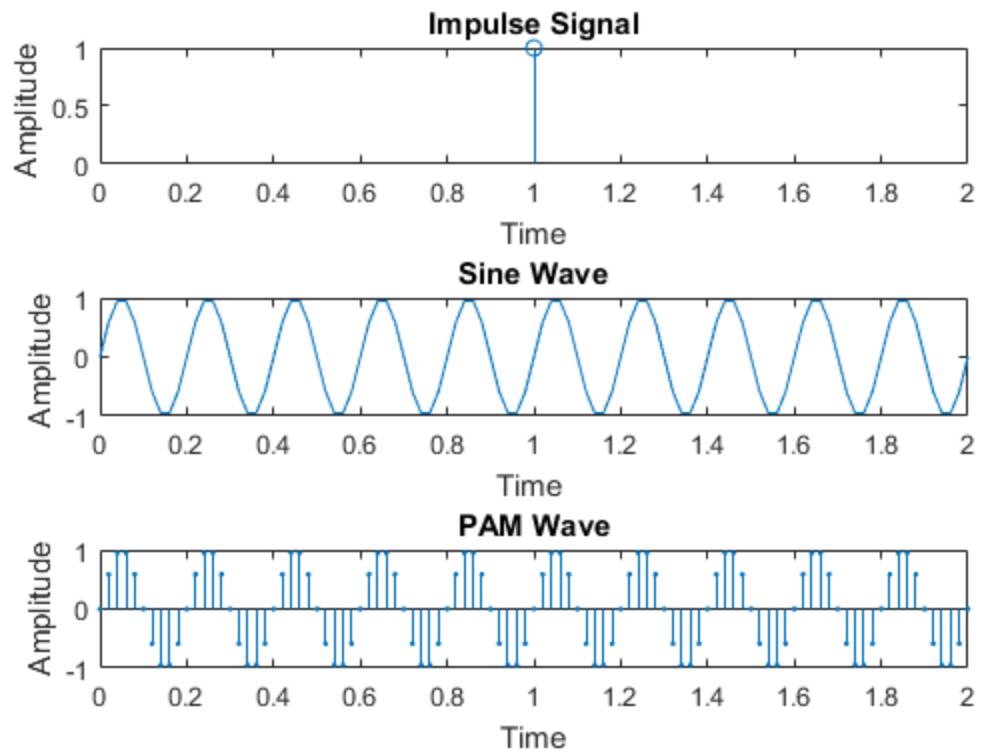
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