**Code:**

**subplot(2,2,1);**

**x=-2:2;**

**y1=exp(x);**

**plot(x,y1)**

**title('Exponential');**

**subplot(2,2,2);**

**x1=-10:10;**

**y=(x1 + abs(x1))/2;**

**stem(x1,y)**

**title('Ramp');**

**subplot(2,2,3);**

**s=-2:2;**

**t=zeros(1,5);**

**t(1,3)=1;**

**stem(s,t);**

**title('Impulse');**

**subplot(2,2,4);**

**a=linspace(0,10);**

**b=sin(a);**

**stem(a,b);**

**title('Sinusoidal');**

**m=-3:3;**

**n=zeros(1,3);**

**o=ones(1,4);**

**n=[n o];**

**stem(m,n);**

**title('Unit step signal')**

**x=-2:2;**

**y=0:2;**

**temp=zeros(1,2);**

**y=power(2,y);**

**y=[temp y];**

**stem(x,y);**

**title('Exponential')**

**subplot(2,1,1)**

**x=-50:50;**

**y=2\*sin(x/2+pi/2);**

**stem(x,y);**

**title('Sinusoidal');**

**xlabel('n');**

**ylabel('x(n)');**

**subplot(2,1,2)**

**x=-50:50;**

**y=2\*cos(x/2+pi/2);**

**stem(x,y);**

**title('Sinusoidal-2');**

**xlabel('n');**

**ylabel('x(n)');**

**subplot(3,1,1);**

**x1=-50:50;**

**y1=sin(x1);**

**plot(x1,y1)**

**title('Signal 1');**

**xlabel('n');**

**ylabel('f(n)');**

**subplot(3,1,2);**

**x2=-50:50;**

**y2=cos(x2);**

**plot(x2,y2);**

**title('Signal 2');**

**xlabel('n');**

**ylabel('f(n)');**

**subplot(3,1,3);**

**x3=-50:50;**

**y3=y1+y2;**

**plot(x3,y3);**

**title('Addition of signals');**

**xlabel('n');**

**ylabel('f(n)');**

**subplot(3,1,1);**

**x1=linspace(-pi,pi,100);**

**y1=sin(x1\*pi);**

**stem(x1,y1)**

**title('Signal wave');**

**xlabel('n');**

**ylabel('f(n)');**

**subplot(3,1,2);**

**x2=linspace(-pi,pi,100);**

**y2=4\*sin(x2\*pi);**

**stem(x2,y2);**

**title('Amplitude: Upscale Signal');**

**xlabel('n');**

**ylabel('f(n)');**

**subplot(3,1,3);**

**x3=linspace(-pi,pi,100);**

**y3=(sin(pi\*x3)/8);**

**stem(x3,y3);**

**title('Amplitude: Downscale Signal');**

**xlabel('n');**

**ylabel('f(n)');**

**subplot(3,1,1);**

**x1=linspace(-pi,pi,50);**

**y1=sin(x1);**

**stem(x1,y1);**

**title('Message Signal');**

**xlabel('n');**

**ylabel('f(n)');**

**subplot(3,1,2);**

**x2=linspace(-pi,pi,100);**

**y2=sin(x2);**

**stem(x2,y2);**

**title('Upscaled Signal');**

**xlabel('n');**

**ylabel('f(n)');**

**subplot(3,1,3);**

**x3=linspace(-pi,pi,10);**

**y3=sin(x3);**

**stem(x3,y3);**

**title('Downscaled Signal');**

**xlabel('n');**

**ylabel('f(n)');**

**subplot(3,1,1);**

**x1=linspace(-pi,pi,100);**

**y1=sin(x1);**

**stem(x1,y1);**

**title('Message Signal');**

**xlabel('n');**

**ylabel('f(n)');**

**subplot(3,1,2);**

**x2=linspace(-pi,pi,100)+2;**

**y2=sin(x2);**

**stem(x2,y2);**

**title('Delayed Signal');**

**xlabel('n');**

**ylabel('f(n)');**

**subplot(3,1,3);**

**x3=linspace(-pi,pi,100)-2;**

**y3=sin(x3);**

**stem(x3,y3);**

**title('Advanced Signal');**

**xlabel('n');**

**ylabel('f(n)');**

















