

Expt 2: Question is as follows

Write Python code for the generation of sequences for Sinusoidal, Exponential, Impulse function, Unit Step function, and Ramp function. (Note: Continuous and Discrete time sequence to be plotted for all signals)

Specification are as follows

a) Sinusoidal: (i) $325\sin(100\pi t)$ for $-0.02 \leq t \leq 0.05$ with 1000 samples ; (ii) $325\sin(100\pi n)$ for $0 \leq n \leq 50$;

b) Exponential: (i) $\exp(j100\pi t)$ for $-0.02 \leq t \leq 0.05$ with 1000 samples, plot real and imaginary parts;

(ii) (2^n) for $-10 \leq n \leq 10$;

c) Unit step ; unit impulse and ramp functions to be generated for $0 \leq n \leq 9$;