

# UEC502 Digital Signal Processing

## LIST OF PROGRAMS — LAB 1

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1. Represent the discrete time signal and plot it using a stem function.  
 $X = 2^n \quad n = -10:1:10$
2. Represent a discrete time signal and plot the real, imaginary & absolute angle (in radian) & angle in degree.  
 $X[n] = e^{j\pi n/6}$
3. WAP to represent a signal:  
 $X[n] = \text{impulse}(n)$   
 $Y[n] = \text{impulse}(n-4)$
4. WAP to determine even and odd part of following signal:  
 $X[n] = 0.8^n$
5. WAP to represent a discrete time signal:  
 $X[n] = 4^n$   
 $-5 \leq n \leq 5$  or zero.
6. Determine discrete time sequence. Also determine Energy & Power; plot graph for same.  
 $X[n] = (1/2)^n u[n] \quad u[n] - \text{unit step function}$