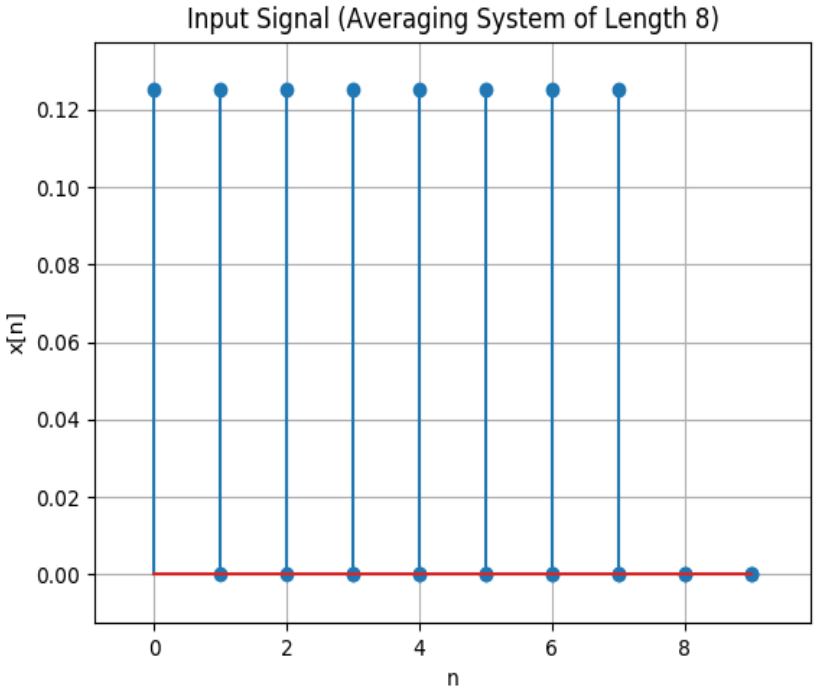
Programming

Observation:

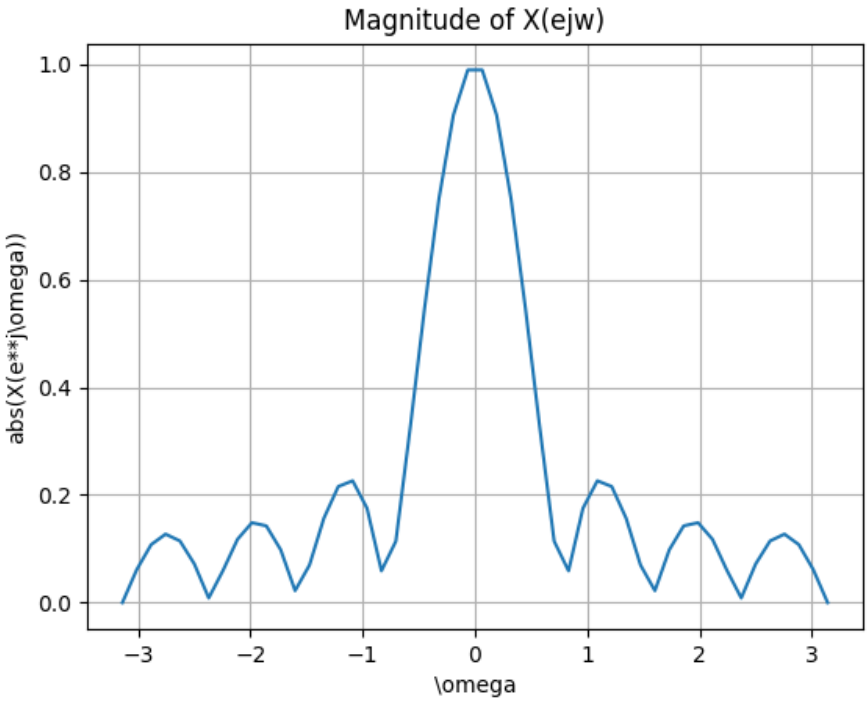
Question 1(a)

It is observed that on increasing the length of averaging system,
(1.) The number of cycles in magnitude spectrum increases.
(2.) The curves become more smooth.
(3.) The y-axis value for the same x-axis value has increased on increasing the length of the averaging system.

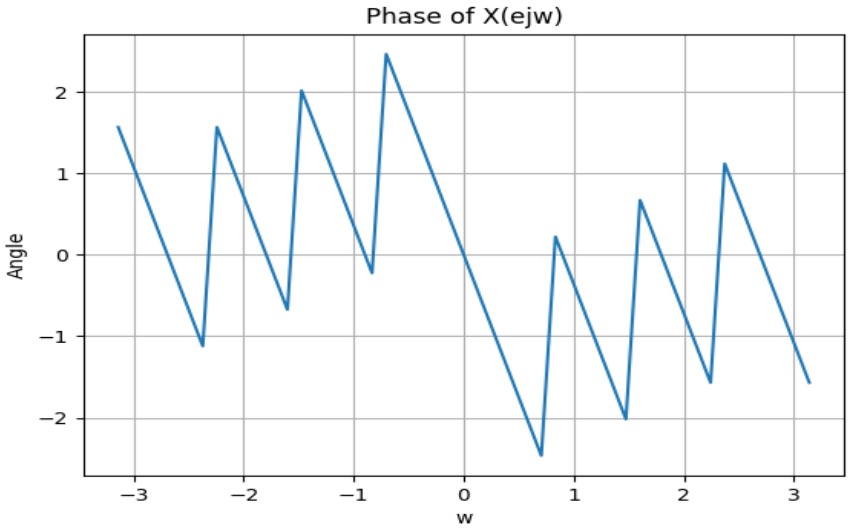
Que1(a)_InputSig_1



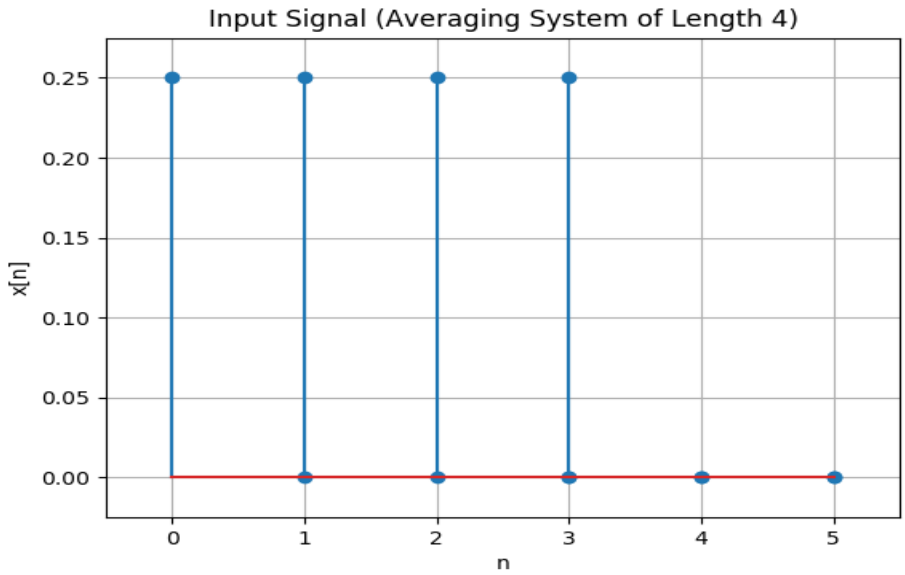
Que1(a)_Mag_1



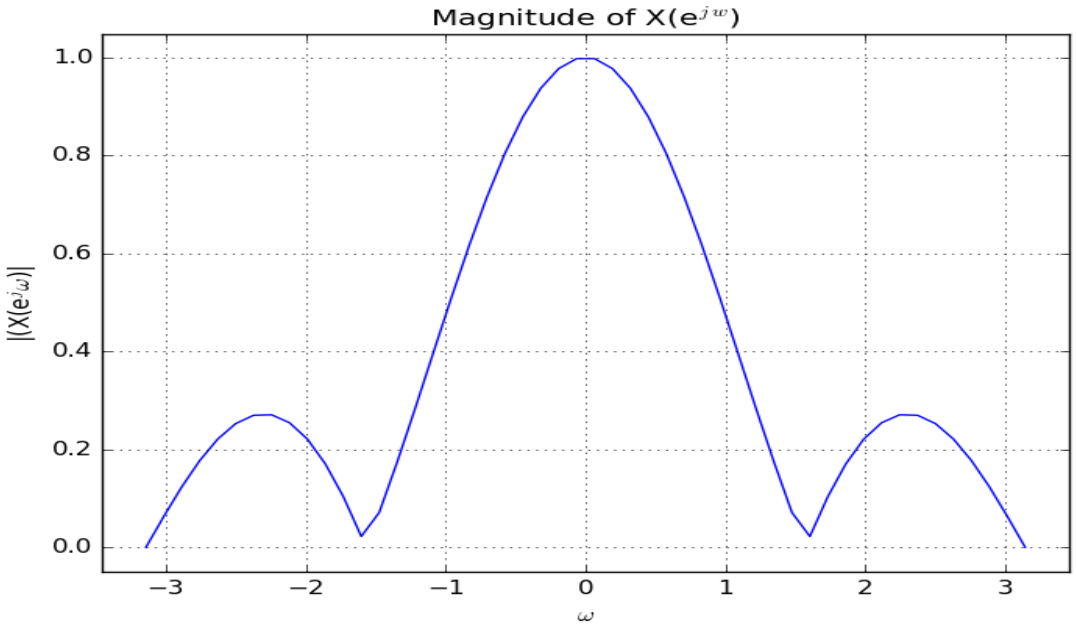
Que1(a)_Phase_1



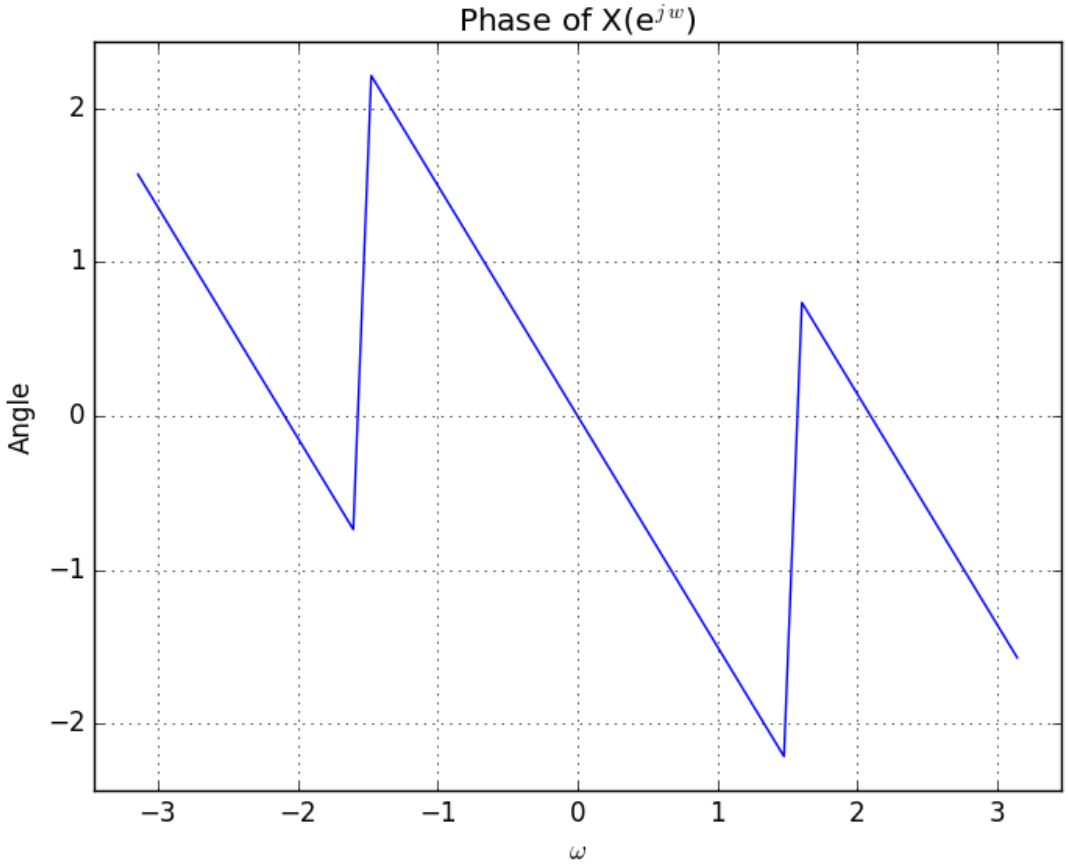
Que1(a)_InputSig_2



Que1(a)_Mag_2



Que1(a)_Phase_2



Question 1(b)

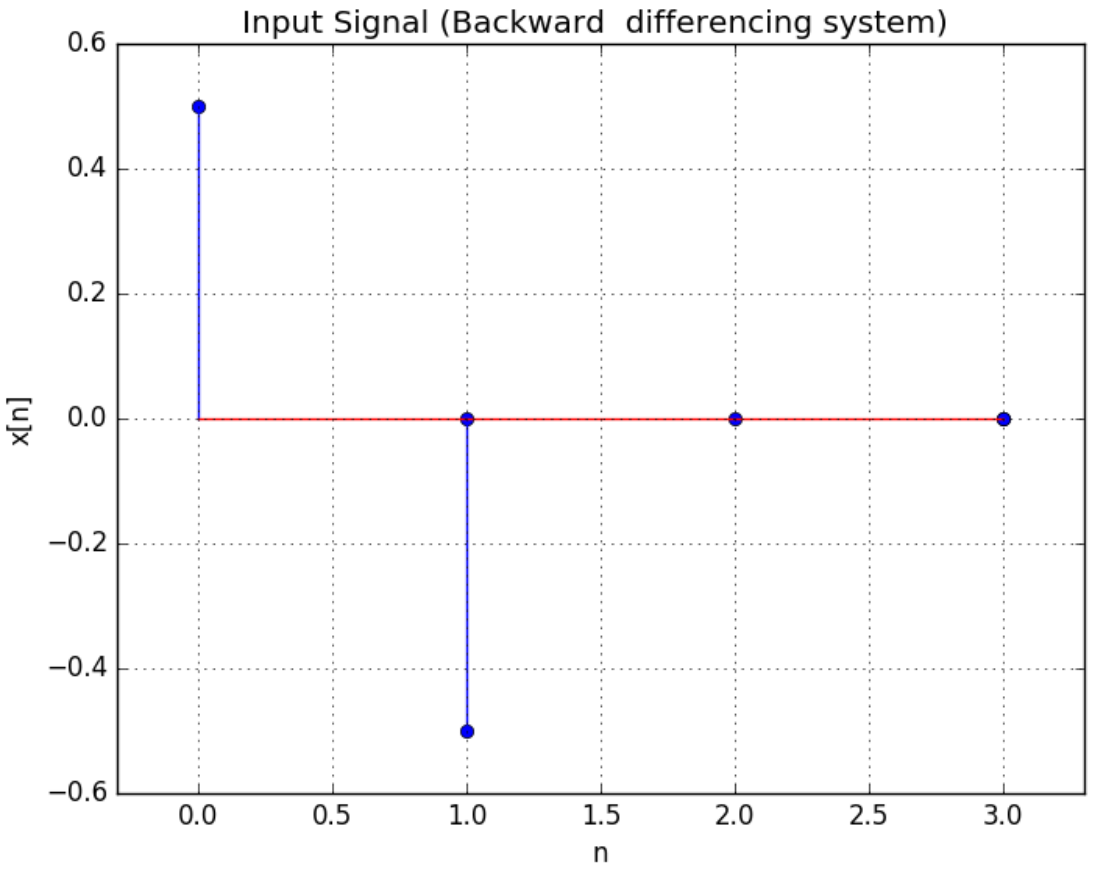
It is observed that on increasing the samples :-

(1.) The shape of the curves remain the same,
but the value of graph remains constant for less values of o omega(w) near zero.

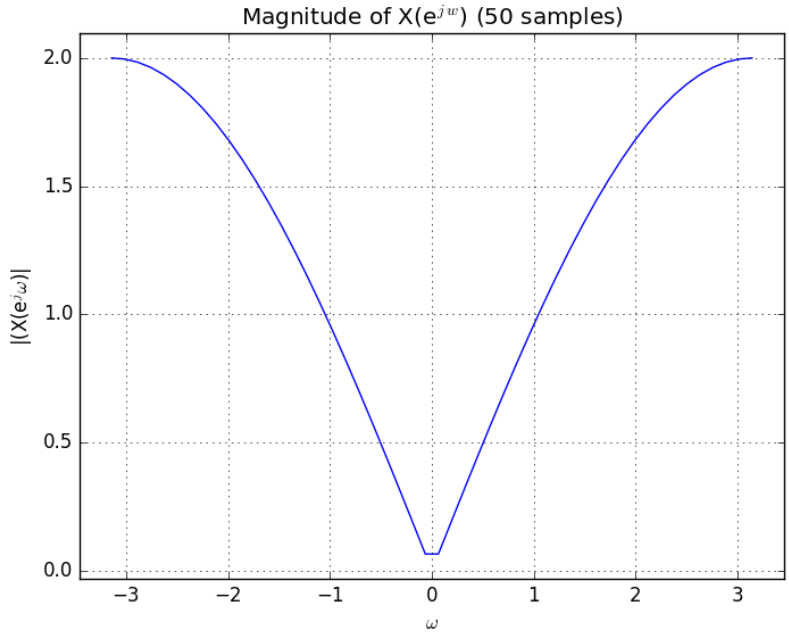
(2.) The curve become more pointed at zero on increasing the samples

(3.) The curve is symmetric about the y-axis

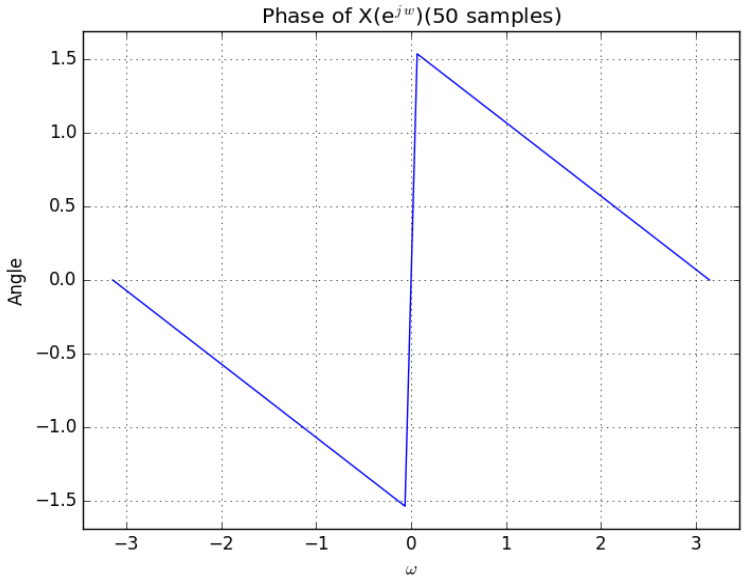
Que1(b)_InputSig_1



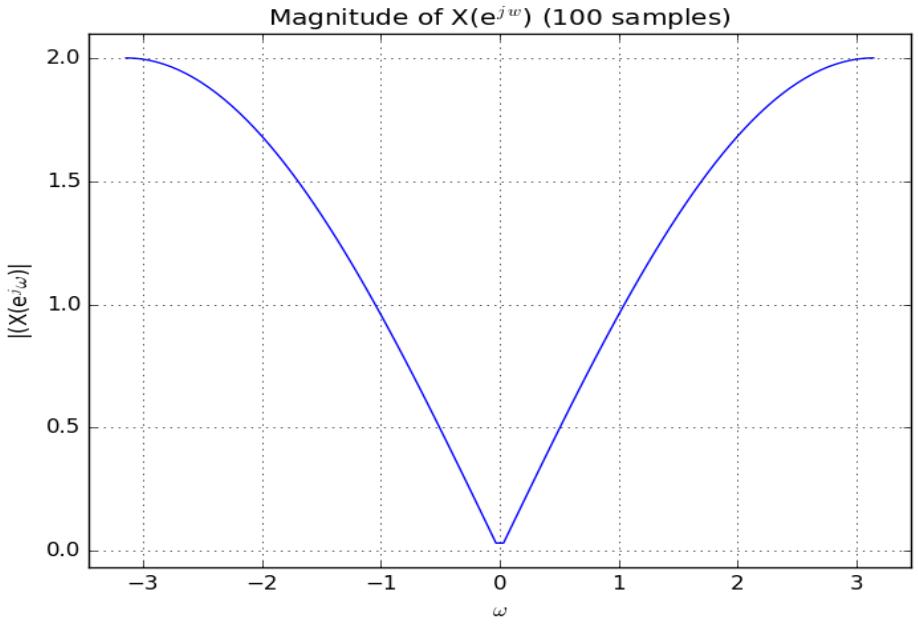
Ques1(b)_Mag_1



Ques1(b)_Phase_1



Ques1(b)_Mag_2



Ques1(b)_Phase_2