

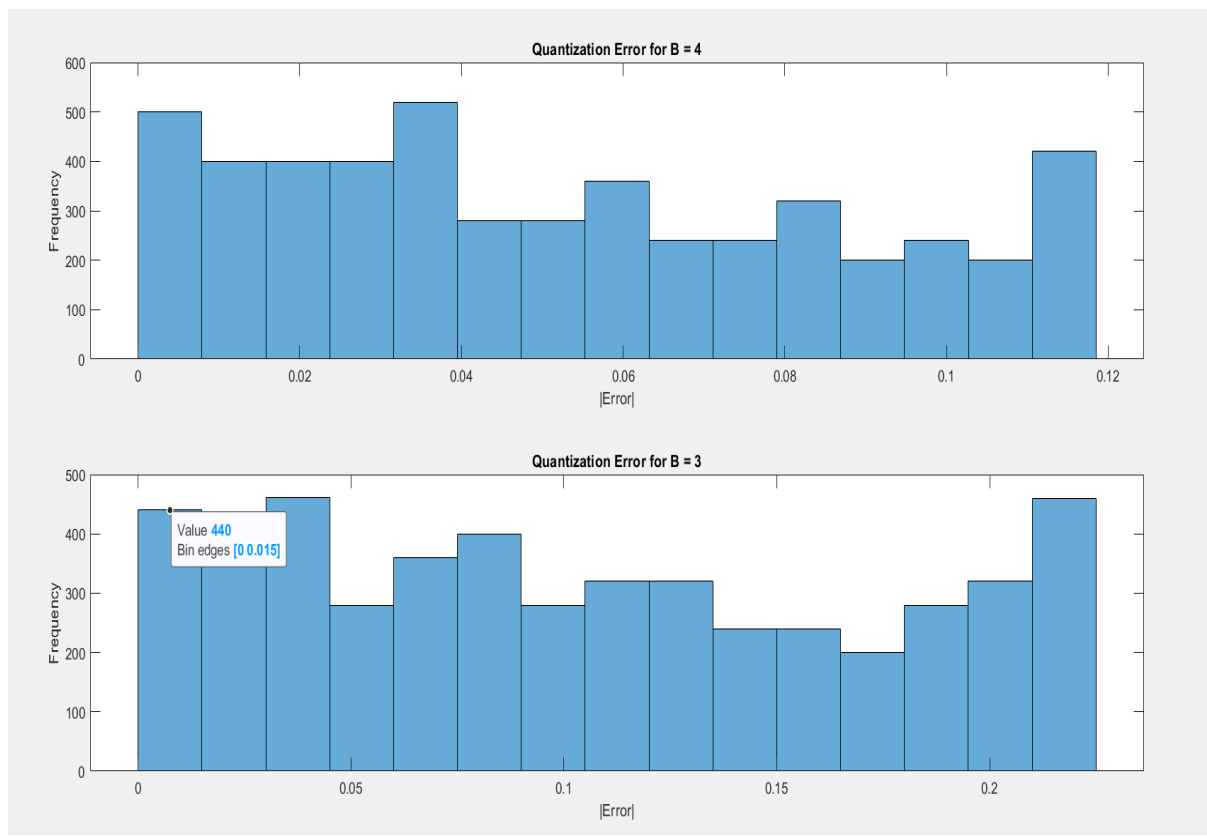
Lab -7 Report

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2021112005

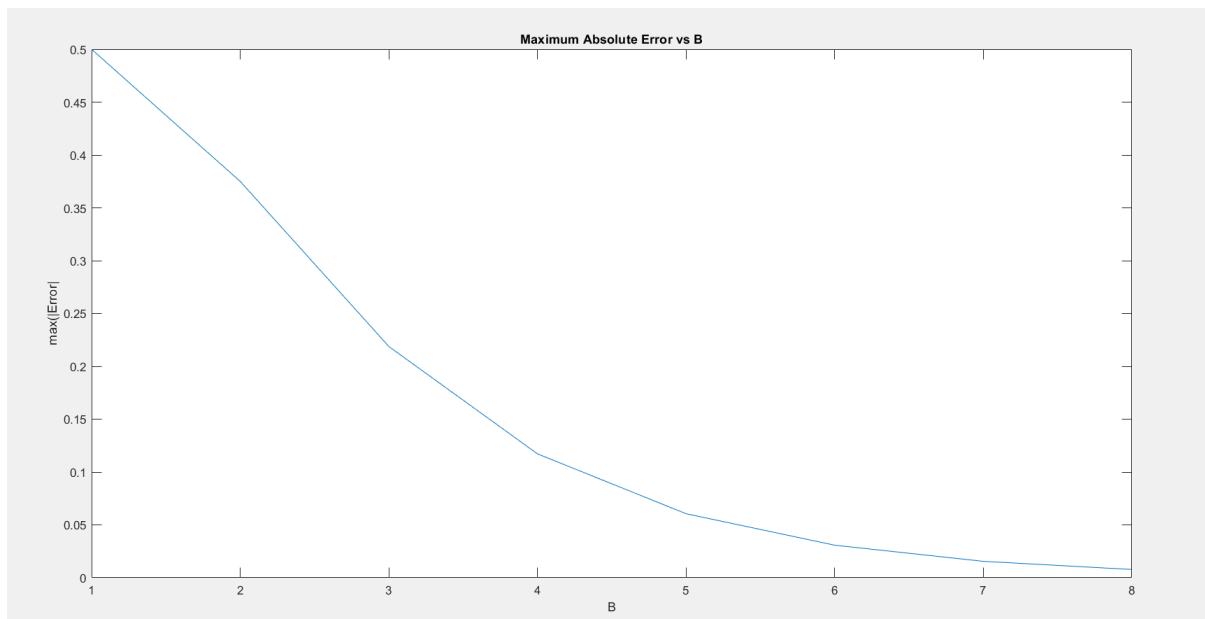
Q1

(d)



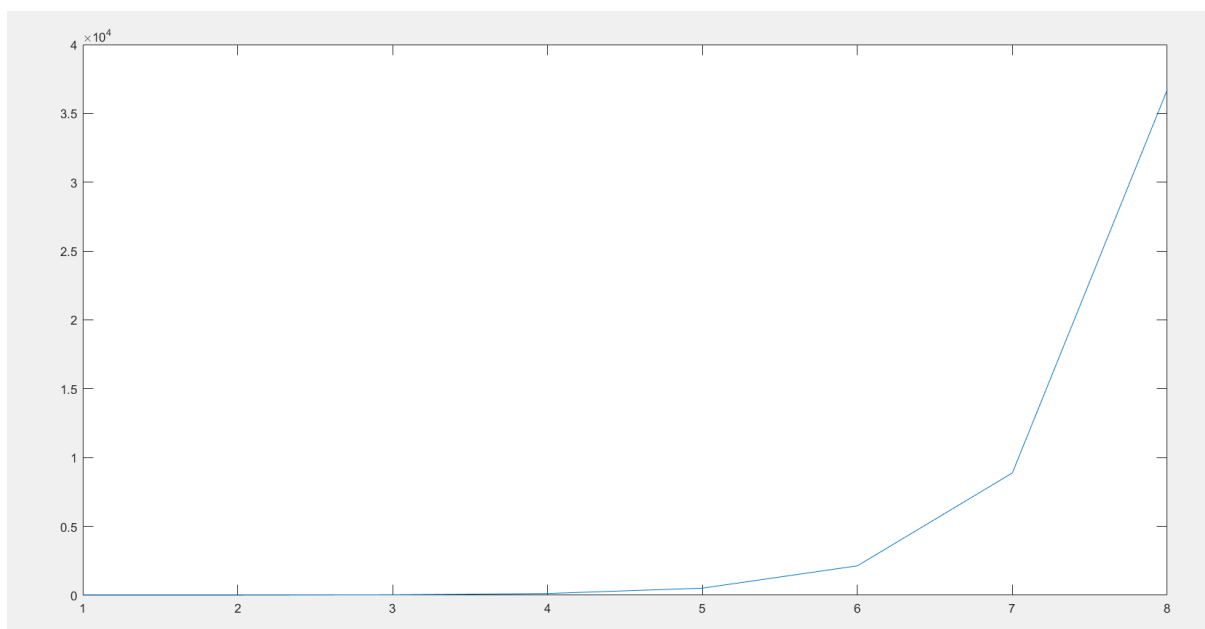
As the value of B increases, the range of |Error| decreases as the error reduces.

(e)



Again, we can observe that the error decreases with increase in B value as the number of quantization levels increase. Thus, the data can be mapped to the levels in a better way.

(f)



The numerator of the SQNR term remains constant but as we increase the value of B, the error reduces. Thus, the denominator of the SQNR term decreases, which in turn

increases the value of SQNR. Thus, SQNR value increases with increase in B.

Q2

(a)

For $B = 3$, the sound has a lot of noise, i.e., we cannot hear the sound as it originally is.

(b)

On increasing B, again the error decreases. Hence, the audio quality keeps on getting better and better.