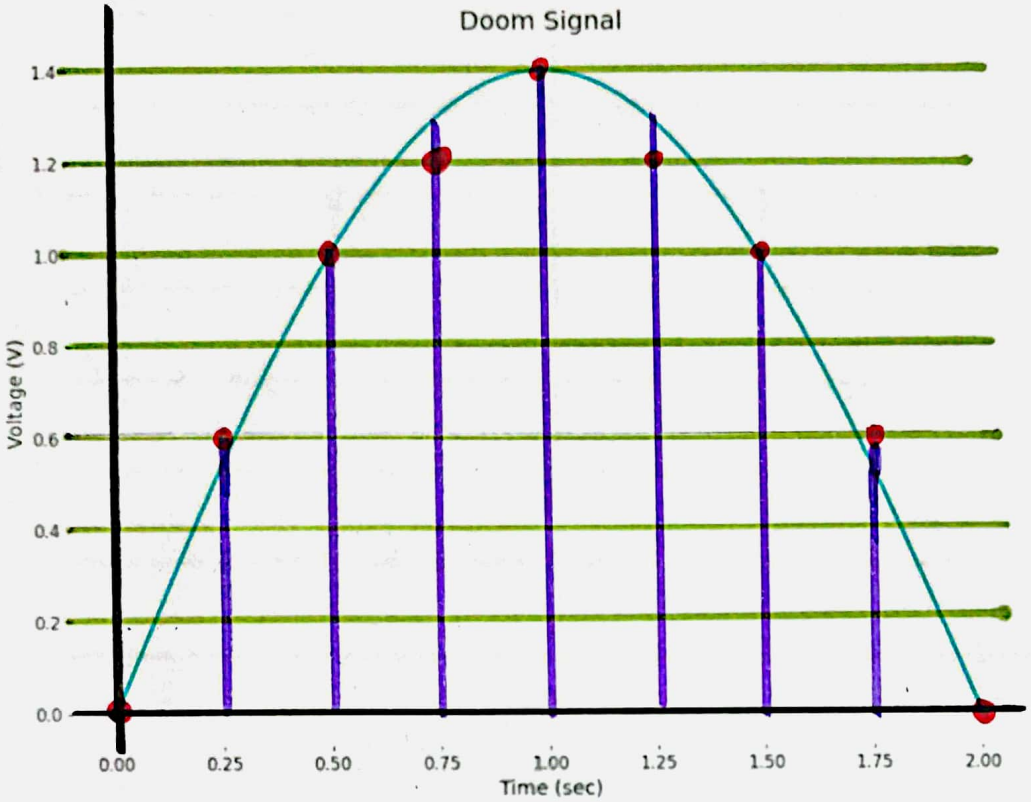
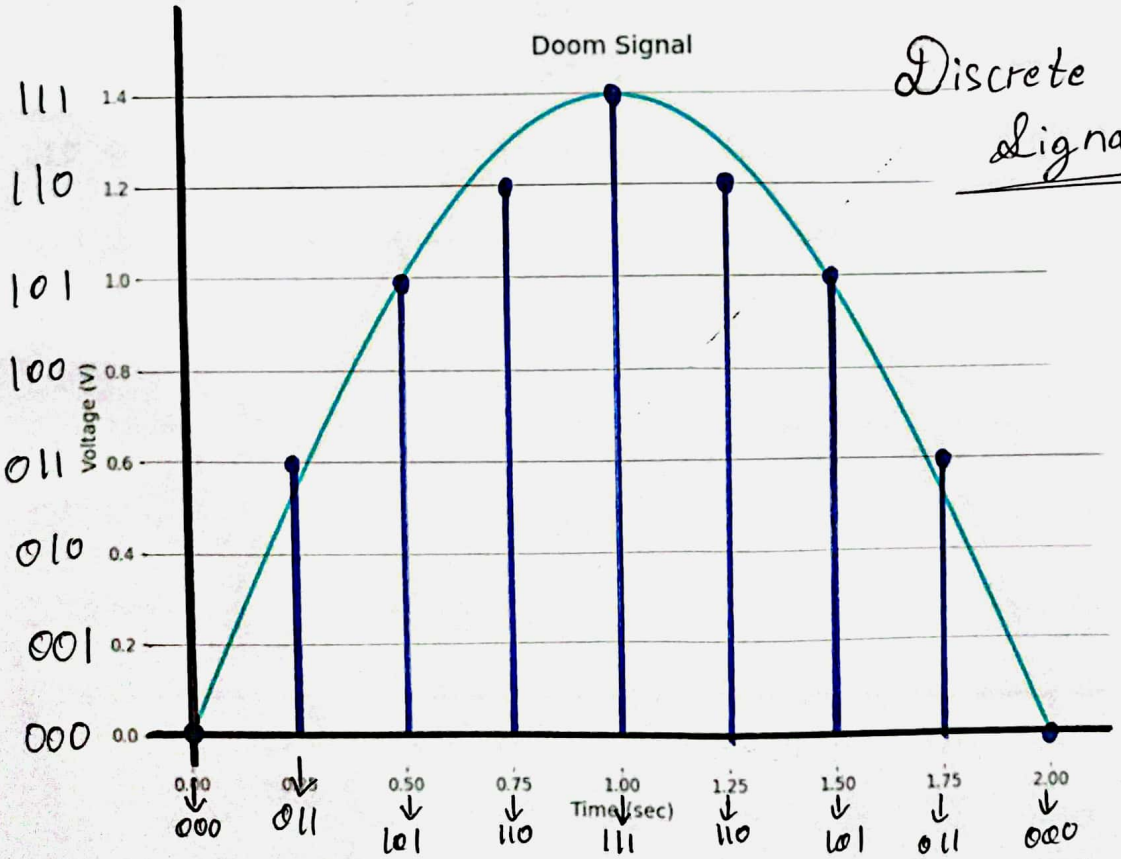
Problem 5.2

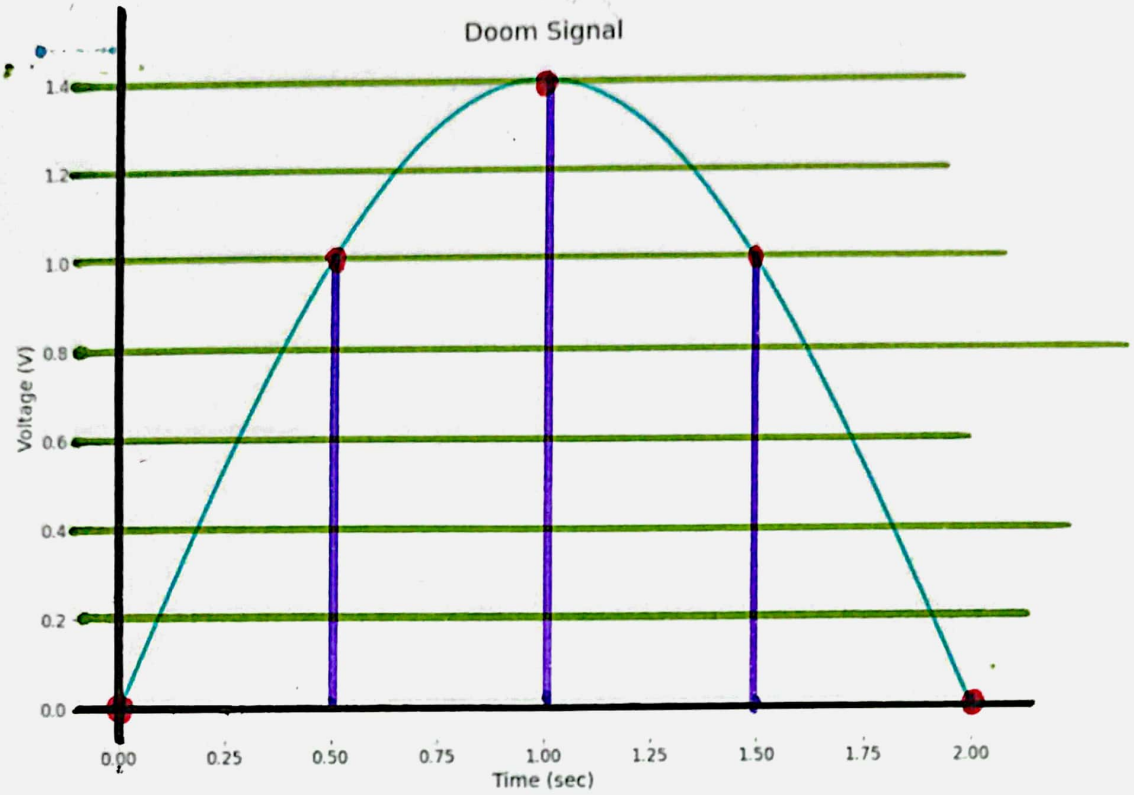
❖ 3-bit encoder with Sampling Time = 0.25sec:

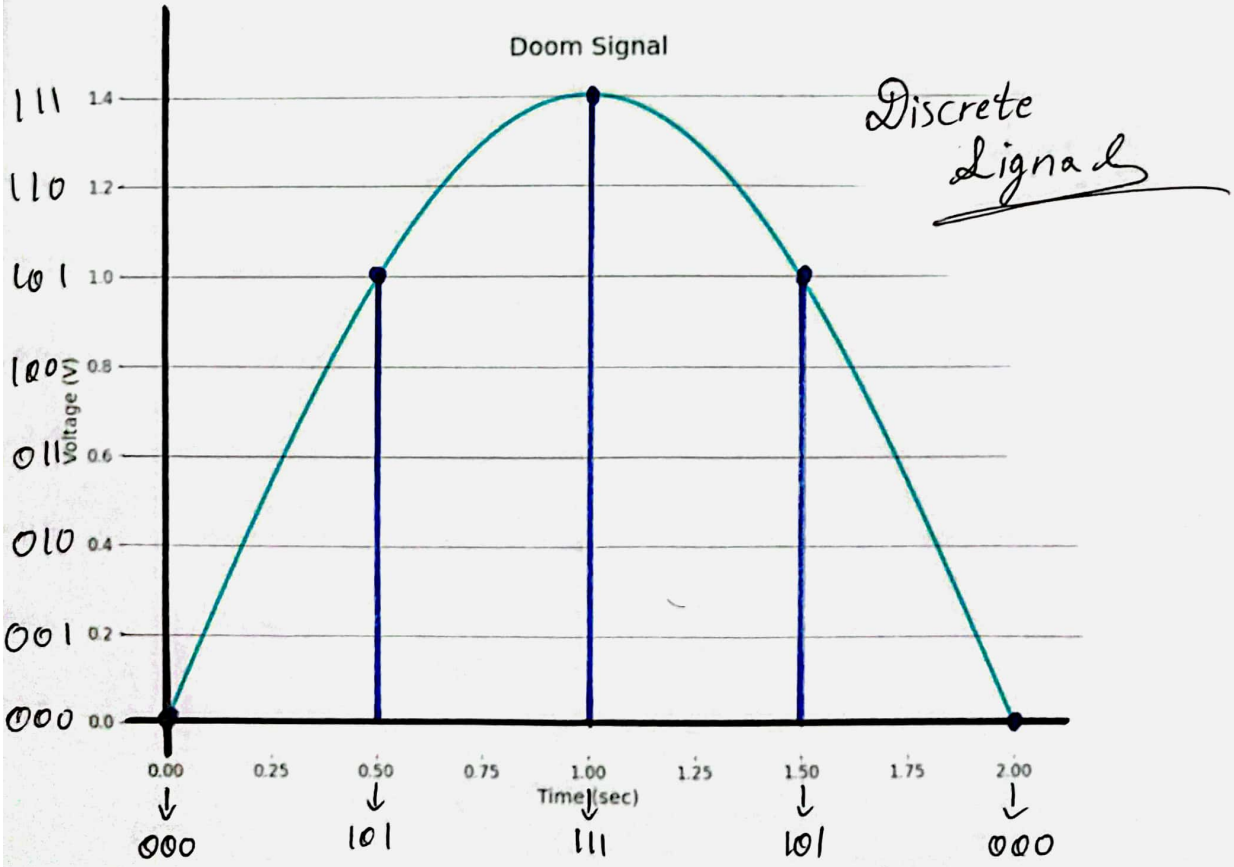




Bit Sequence: 000 011 101 110 111 110 101 011 000

❖ 3-bit encoder with Sampling Time = 0.5sec:

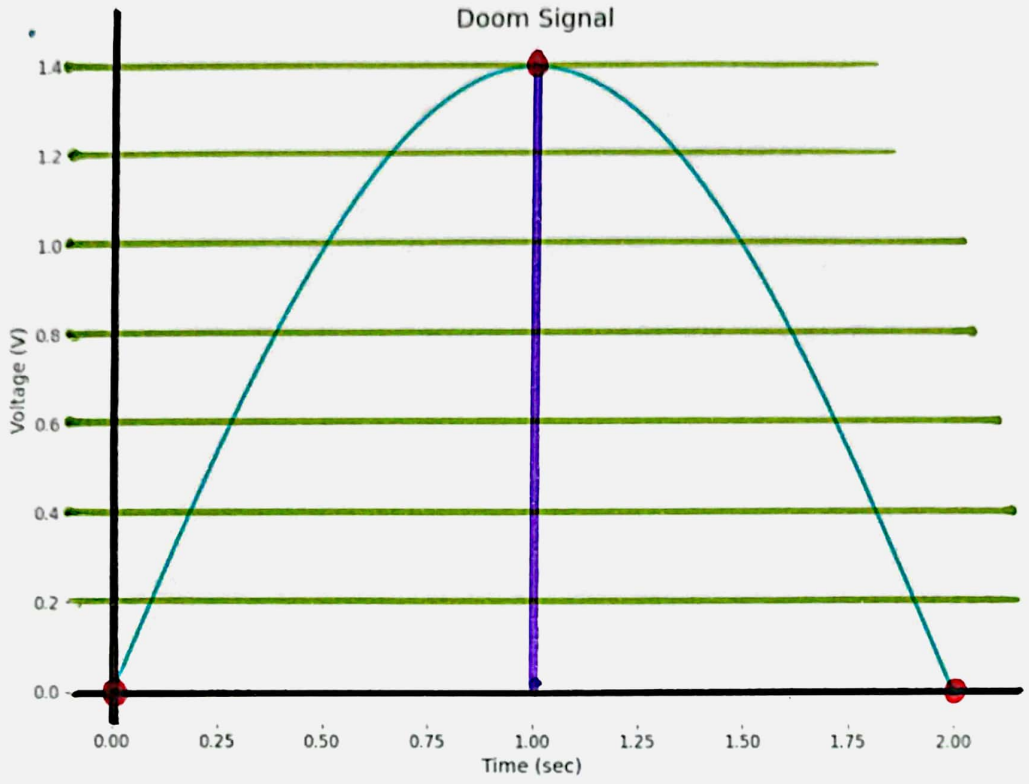


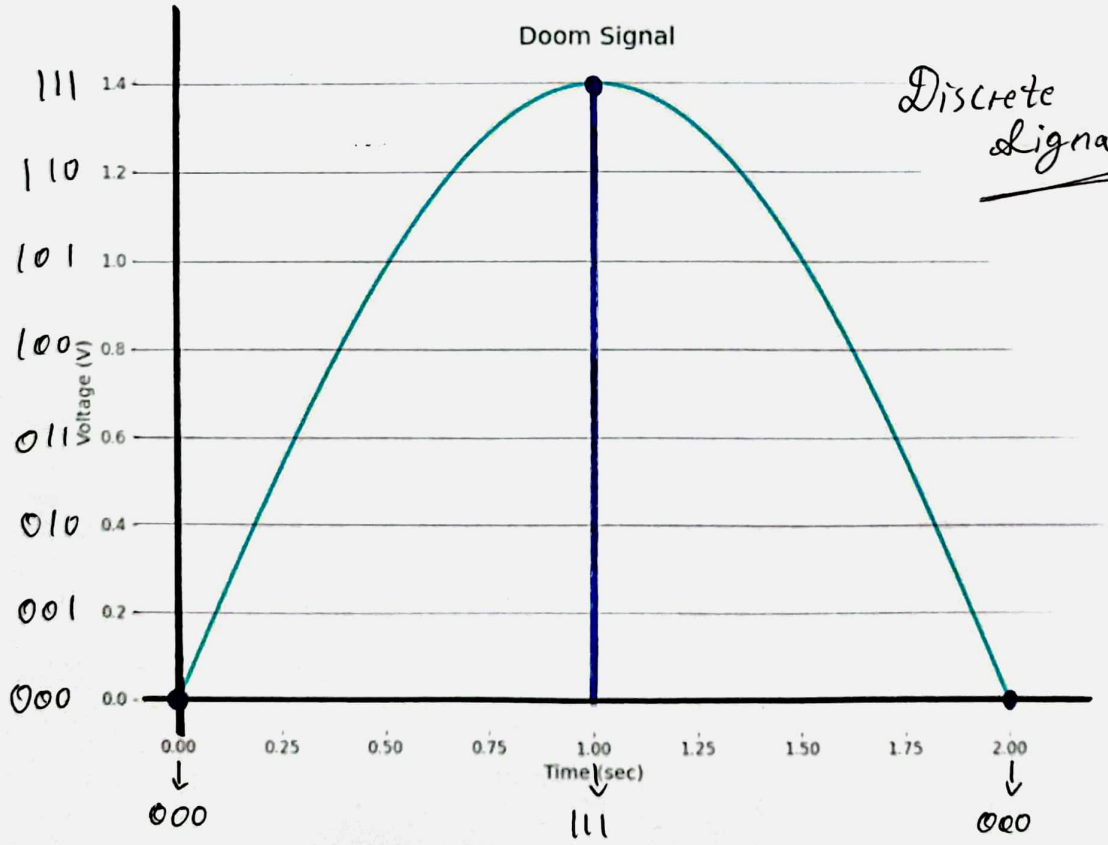


Discrete Signals

Bit sequence : 000 101 111 101 000

❖ 3-bit encoder with Sampling Time = 1sec:

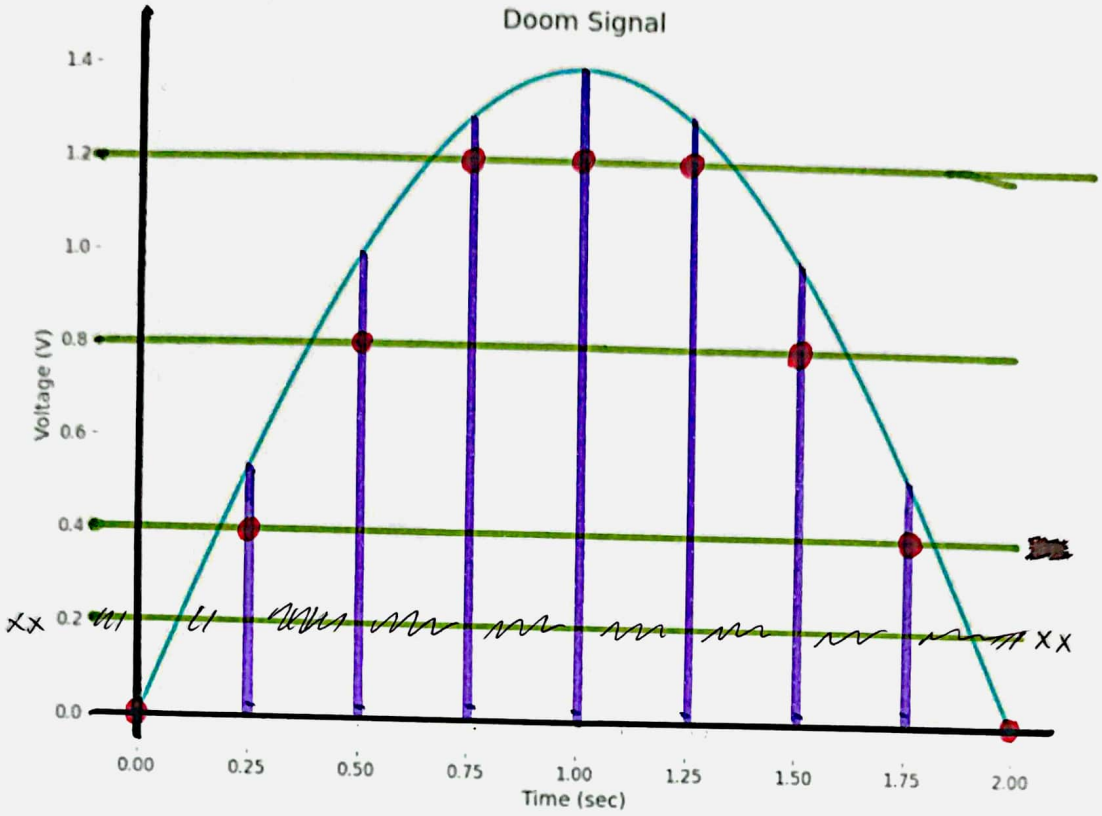


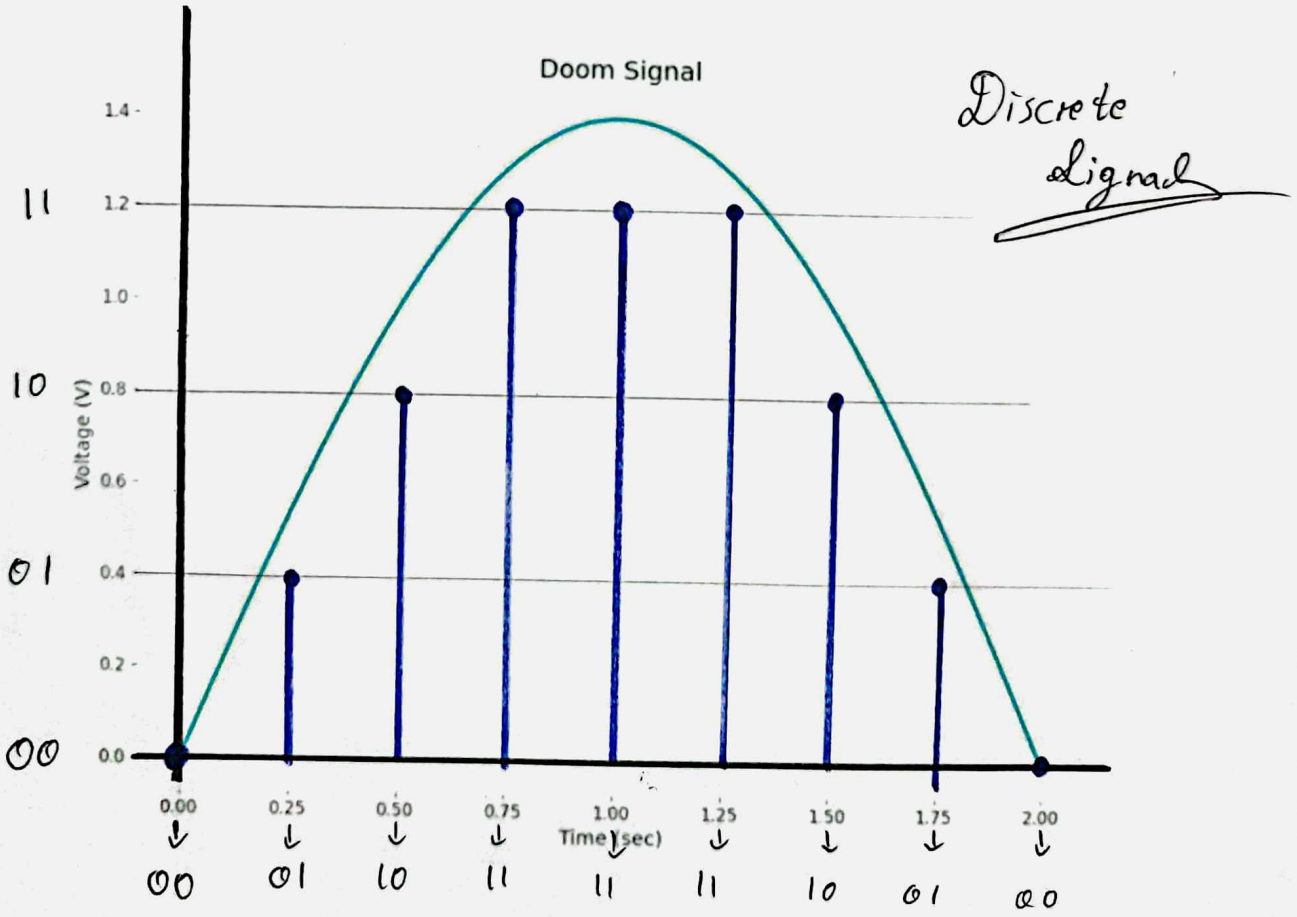


Discrete Signal

Bit Sequence: 000111000

❖ 2-bit encoder with Sampling Time = 0.25sec:





Bit Sequence: 0001101111111001 00

❖ Conclusion: ⊛ AS Sample Time increases, accuracy decreases because some details are Lost.

⊛ As No. of bits decrease, accuracy decreases

⊛ For best Result, increase no. of bits & decrease Sampling time