Report of Lab 2

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1. Since this question involved just the generation of source bits and adding the propagation error, the error observed is almost identical to the given propagation error (0.05).
2. (3, 1) Repetition code helped in reducing the error rate by a lot. We achieved error rate of around 0.007 for the propagation error of 0.05. The downsize was the increased data(three times original) to achieve this which is quite impractical in real life scenarios.
3. (7, 4) Hamming Code helps in reducing the excessive amount of data while trying to reduce the propagation error too. We achieved the error rate of around 0.0098 for propagation error of 0.05, which is slightly more than the (3, 1) repetition code but the advantage is in the less amount of bits added to the source bits.