**Lab2 OFDM: Performance Evaluation**

**Exercise 1: OFDM System in AWGN Channel**

Implement an OFDM system with N = 64 subcarriers and bandwidth W = 39(last two student number) / 50 in MHz. Use 4-QAM as the modulation scheme. Perform the OFDM demodulation in an AWGN channel for SNRs ranging from 0 dB to 20 dB using Monte Carlo simulation runs and plot the resulting BER.