**Assignment 4**

**Explicit Feedback**

Please explain the feedback mechanism for CSI matrix and noncompressed beamforming feedback matrix.

**Downlink Zero-Forcing Beamforming (Matlab Simulation)**

Consider downlink MU-MIMO transmission with one AP and 4 single-antenna receiver, where the AP has 4 antennas. Given a noise power, randomly generate more than 1000 channel matrices. For each channel matrix, use zero-forcing principle to design the downlink precoder. Please show the distribution of SNR at the 4 receivers.