WSI Assignment 3
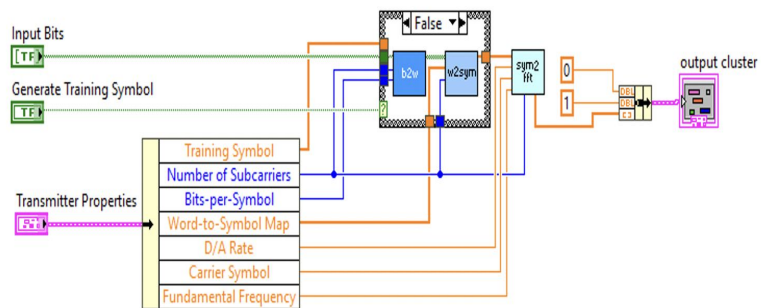
Tathagat Pal
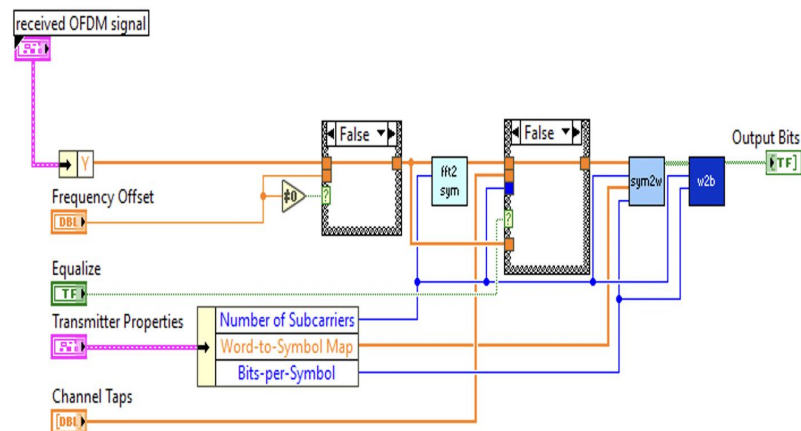2019211

LabVIEW Schematic
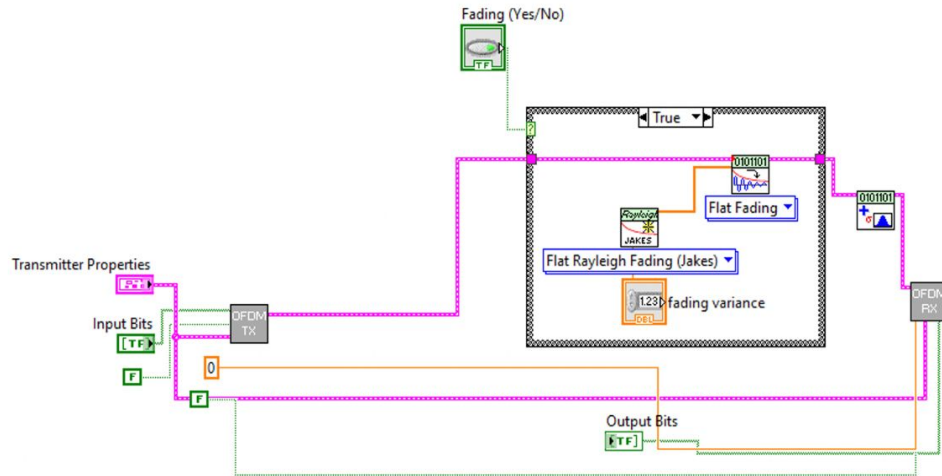
OFDM transmitter block (Tx), followed by Rayleigh flat fading channel and AWGN. The last block is receiver (Rx).
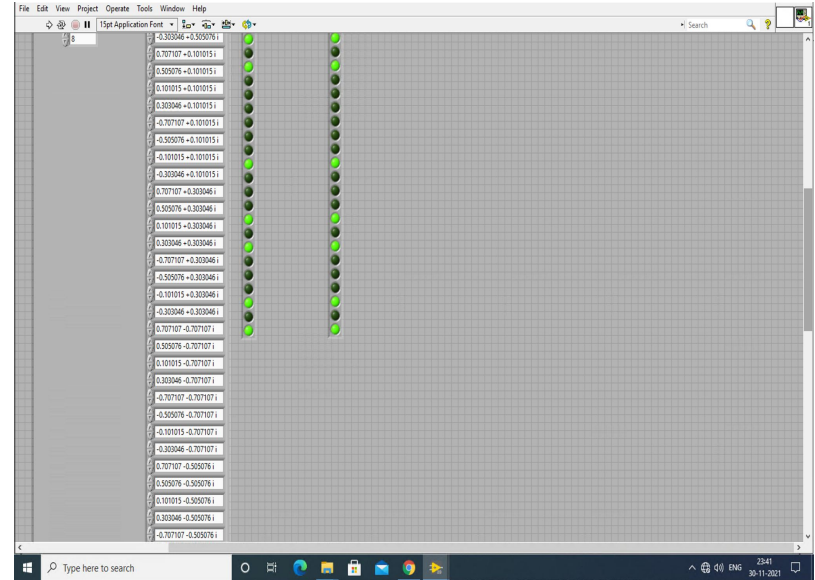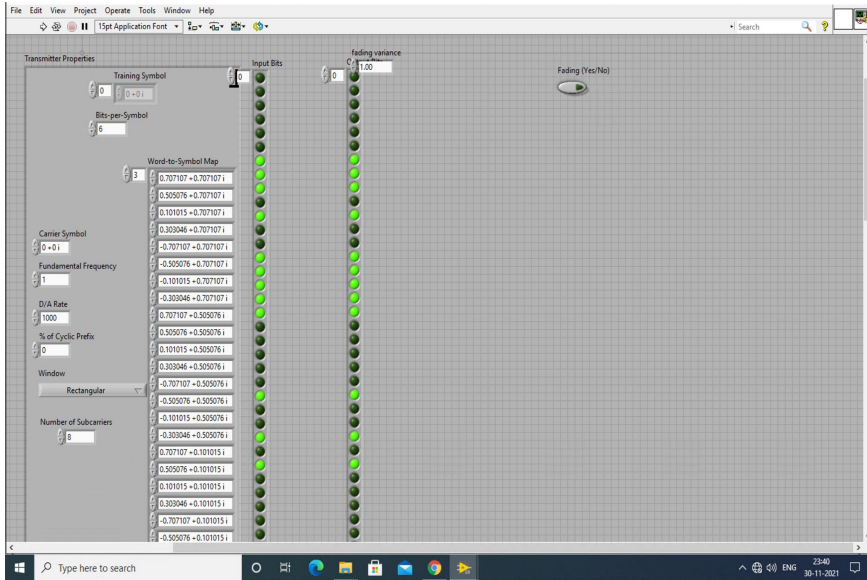
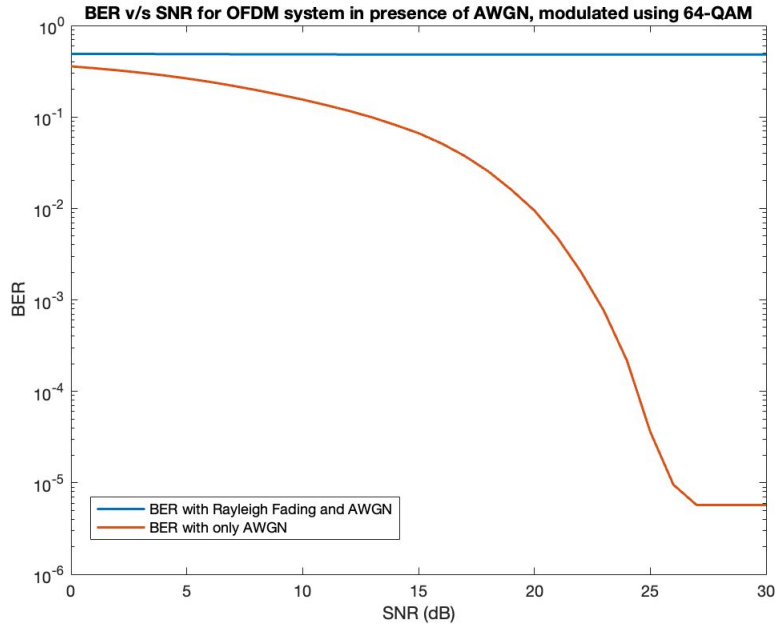# OFDM Tx and Rx Block
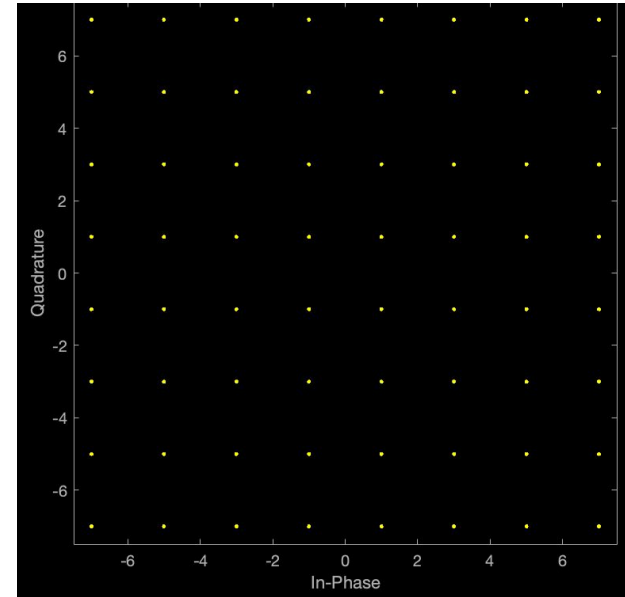

Tx Block

Rx Block

Front Panel (without fading)

64 symbols (in complex form) because we had to transmit using 64-QAM. It could be seen that the input bits and the output bits (received) are same.

MATLAB outputs

Transmit constellation plot

10 number of carriers were considered in this OFDM system. The system performance degrades if Rayleigh flat fading channel is added which is evident from the plot.

Codes are attached in this folder

https://drive.google.com/drive/folders/1l--4cjEGybDO4PKF-lOTWcfZZlf1th4R?usp=sharing