```matlab
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%
% Assignment : 03
% Course     : DSP Lab 2021
%
% Details    : This file generates OFDM pulses with digital modulation
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%

clear all; close all; clc;


%%Generate random bits with uniform distribution
%%Map the bits to BPSK and QPSK
% no. of the symbols equals to no. of subcarrier in assignment 2.

%% Generation of OFDM pulses as in assignment 2




%% IDFT of OFDM signal using summation
% This section of the code takes the IDFT of the OFDM signal




%% IDFT of OFDM signal using Matlab IFFT
% This section of the code takes the IFFT of the OFDM signal

% Both the output (your IDFT and Matlab IFFT) output should exactly
match



%% Plotting the spectrum of the signal
% This section plots the spectrum of the signal

% Spectrum of the signal should exactly match with the subcarriers you
have
% taken in the input.

% If the spectrum doesn't match for any specific case then you should
% mention that case along with the reasons

% Power of the all the frequency bins should be 1. And you should
mentioned
% how you have done the power adjustment (if you have done it)
```