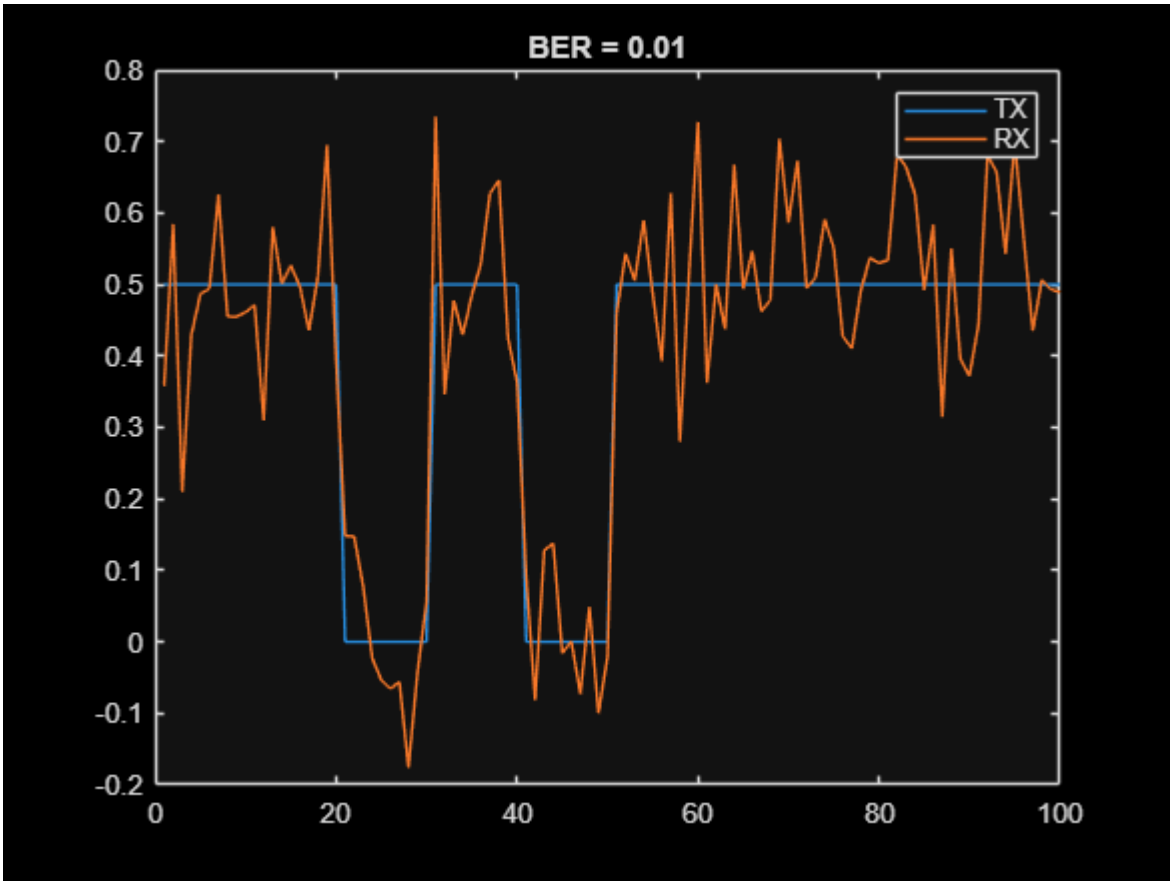
```
% Fiber Simulation
clear; clc;

% 1. Generate bits
data = randi([0 1], 1, 100);

% 2. NRZ signal
tx = repelem(data, 10);

% 3. Attenuation
tx = tx * 0.5;

% 4. Dispersion (blur)
rx = conv(tx, [0.3 0.4 0.3], 'same');

% 5. Add noise
rx = rx + 0.1*randn(size(rx));

% 6. Sample
rx_bits = rx(5:10:end) > 0.2;
rx_bits = rx_bits(1:100);

% 7. BER
BER = mean(data ~= rx_bits);

% 8. Plot
plot(tx(1:100)); hold on; plot(rx(1:100));
legend('TX','RX'); title(['BER = ' num2str(BER)]);

disp(['BER = ' num2str(BER)]);
```

*BER = 0.01*

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