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Load Data from rawtrimmed_158.bin

```
clear; close all; clc;
```

Get Signal

```
%----- Setup
Tfull = 0.5;           % Time interval of data to load
fs = 40e6/7;          % Sampling frequency (Hz)
N = fs*Tfull;
N = floor(N/16)*16;    % Number of data samples to load
nfft = 2^10;           % Size of FFT used in power spectrum estimation
fIF = 1.610476e6;       % Intermediate frequency (Hz)

%----- Load data
fid = fopen('C:\Users\gsh04\Desktop\2024-Fall\GPS\exam2\problem 5\dataout_raw_trimmed_158.bin','r','l');
[Y,count] = binloadSamples(fid,N,'dual');
Y = Y(:,1);
```

Generate Code

```
%---- Generate all possible PRN (37 SVIDs or PRN Sign No.)
% LFSR Parameters:
nStages = 10;
ciVec1 = [10, 3]';
ciVec2 = [10, 9, 8, 6, 3, 2,]';
a0Vec1 = ones(nStages,1);
a0Vec2 = ones(nStages,1);
% G2Delay = [5;6;7;8;17;18;139;140;141;251;252;254;255;256;257;258;...
% 469;470;471;472;473;474;509;512;513;514;515;516;859;860;...
% 861;862;863;950;947;948;950];
% Oversampling Parameters:
Tc = 1e-3/1023;        % Chip interval in seconds
T = 1/fs;              % Bandpass Sampling time interval in seconds
delChip = T/Tc;        % Sampling interval in chips
Np = 2^nStages - 1;     % Period of the sequence in chips
Ns = length(Y);        % Number of Samples should equal to that of Y(signal)
Ta = 0.001;            % Accumulation time in seconds
Nk = floor(Ta/T);      % Number of samples in one 1-ms accumulation
% Generate 37 Sequences and Oversample them:
codeOS = zeros(Nk,37);
G2tab = [2,6;3,7;4,8;5,9;1,9;2,10;1,8;2,9;3,10;2,3;3,4;5,6;6,7;7,8;...
8,9;9,10;1,4;2,5;3,6;4,7;5,8;6,9;1,3;4,6;5,7;6,8;7,9;8,10;1,6;2,7;...
3,8;4,9;5,10;4,10;1,7;2,8;4,10];
```