```matlab
clear; close all; clear all;
%% test_delay1.m
% Global parameters
Nb = 10;     % Number of buffers
Ns = 128;    % Samples in each buffer
Nmax = 200; % Maximum delay

Nd = 10;     % Delay of block
Nd1 = 20;    % 2nd Delay

% Initialize the delay block
state_delay1 = delay_init(Nmax, Nd);
state_delay2 = delay_init(Nmax, Nd1);

% Generate some random samples.
x = randn(Ns*Nb, 1);
% Reshape into buffers
xb = reshape(x, Ns, Nb);

% Output samples
yb = zeros(Ns, Nb);
yb1 = zeros(Ns, Nb);

% Process each buffer
for bi=1:Nb
  [state_delay1 yb(:,bi)] = delay(state_delay1, xb(:,bi));
  [state_delay2 yb1(:,bi)] = delay(state_delay2, yb(:,bi)); %2nd delay
end

% Convert individual buffers back into a contiguous signal.
y = reshape(yb1, Ns*Nb, 1);

% Check if it worked right
n = [0:length(x)-1];

figure(1);
plot(n, x, n, y);

figure(2);
plot(n+Nd+Nd1, x, n, y, 'x');

% Do a check and give a warning if it is not right.  Skip first buffer in check
% to avoid initial conditions.
n_chk = 1+[Ns:(Nb-1)*Ns-1];
if any(x(n_chk - Nd) ~= y(n_chk))
  warning('A mismatch was encountered.');
end
```