

```
clear;clc;
% Example from pp52-55
% Experimental Methods, W. Bolton (1996), Elsevier
%
% Five measurements of time [sec] taken for 10 oscillations
%-----
% Experiment 1
%-----
times1 = [20.1 20.0 20.2 20.1 20.1];
count1 = length(times1);

% Compute the mean time
mean_times1 = mean(times1);

% Compute deviation using built-in Octave command,
% deviation_squared and tabulate the results
deviation1 = times1 - mean_times1;
deviation1_sq = deviation1.^2;

disp(" ")
disp("Experiment 1")
disp("----- ")
[times1' deviation1' deviation1_sq']
count1
mean_times1

% Compute standard deviation using built-in Octave command
std_dev1 = std(times1)

% Compute standard error for the two sets of experiments
std_err1 = std_dev1/sqrt(count1)

%-----
% Experiment 2
%-----
clear;
times2 = [19.5 20.5 19.7 20.6 20.2];
count2 = length(times2);

% Compute the mean time
mean_times2 = mean(times2);

% Compute deviation using built-in Octave command,
% deviation_squared and tabulate the results
deviation2 = times2 - mean_times2;
deviation2_sq = deviation2.^2;
disp(" ")
disp("Experiment 2")
disp("----- ")
[times2' deviation2' deviation2_sq']
count2
mean_times2

% Compute standard deviation using built-in Octave command
std_dev2 = std(times2)

% Compute standard error for the two sets of experiments
std_err2 = std_dev2/sqrt(count2)
```