

```
clear;clc;
% Example from p84
% Experimental Methods, W. Bolton (1996), Elsevier
%
% Measurements of tensile strength of a polymer by two students
%-----
% Student A
%-----
clear; format short g;
Student_A = [29.0 28.7 28.9 29.3 28.8 29.4 29.1 29.2 29.7 28.4 29.0 29.1 28.6 28.8]; % [MPa]
count_A = length(Student_A);

% Compute the mean time
mean_Student_A = mean(Student_A);

% Compute deviation using built-in Octave command,
% deviation_squared and tabulate the results
deviationA = Student_A - mean_Student_A;
deviationA_sq = deviationA.^2;

disp(" ")
disp("Measurements of Student A")
disp("-----")
[Student_A' deviationA' deviationA_sq']
count_A
mean_Student_A

% Compute standard deviation using built-in Octave command
std_dev_A = std(Student_A)

% Compute standard error for the two sets of experiments
std_err_A = std_dev_A/sqrt(count_A)

%-----
% Student B
%-----
clear; format short g;
Student_B = [29.2 29.8 29.8 29.4 29.6 28.9 29.4 29.5 28.7 29.6 30.2 29.2 29.9 29.9]; % [MPa]
count_B = length(Student_B);

% Compute the mean time
mean_Student_B = mean(Student_B);

% Compute deviation using built-in Octave command,
% deviation_squared and tabulate the results
deviationA = Student_B - mean_Student_B;
deviationA_sq = deviationA.^2;

disp(" ")
disp("Measurements of Student B")
disp("-----")
[Student_B' deviationA' deviationA_sq']
count_B
mean_Student_B

% Compute standard deviation using built-in Octave command
std_dev_B = std(Student_B)

% Compute standard error for the two sets of experiments
std_err_B = std_dev_B/sqrt(count_B)
```