Lab 1 (Basic Matlab introduction)

Commands to learn:

Defining variables, vectors or matrices:
A=5;
B=[1 2 3];
C=[1 2 3; 4 5 6; 7 8 9];
D=[B; B; B];

x1=0:5:100;
x2=x1';
x3=[x2 x2 x2 x2 x2];

T=ones(10,20);
T3D=ones(10, 20, 2);

Referring to elements of vectors or matrices
E=B(2);
F=C(3,1);
G=C(:,2);
H=C([1 3],2);
T1=T(1:3,1:3);
x4=x3(3:end,:);
x5=x3(1:3:15,2:5);

Asking and using the size of a matrix
S=size(x3);
S1=size(x3,2);
TC=ones(size(T));
TC2=ones(size(T,1),size(T,2)/2);

Saving and loading variables
save V;
clear all;
load V;
save D D;
clear all;
load D;
clear all;
load V;
save V2 D T x3;
clear all;
load V2;

Deleting variables, clearing the screen:
clc;
clear A;
clear all;
close all;