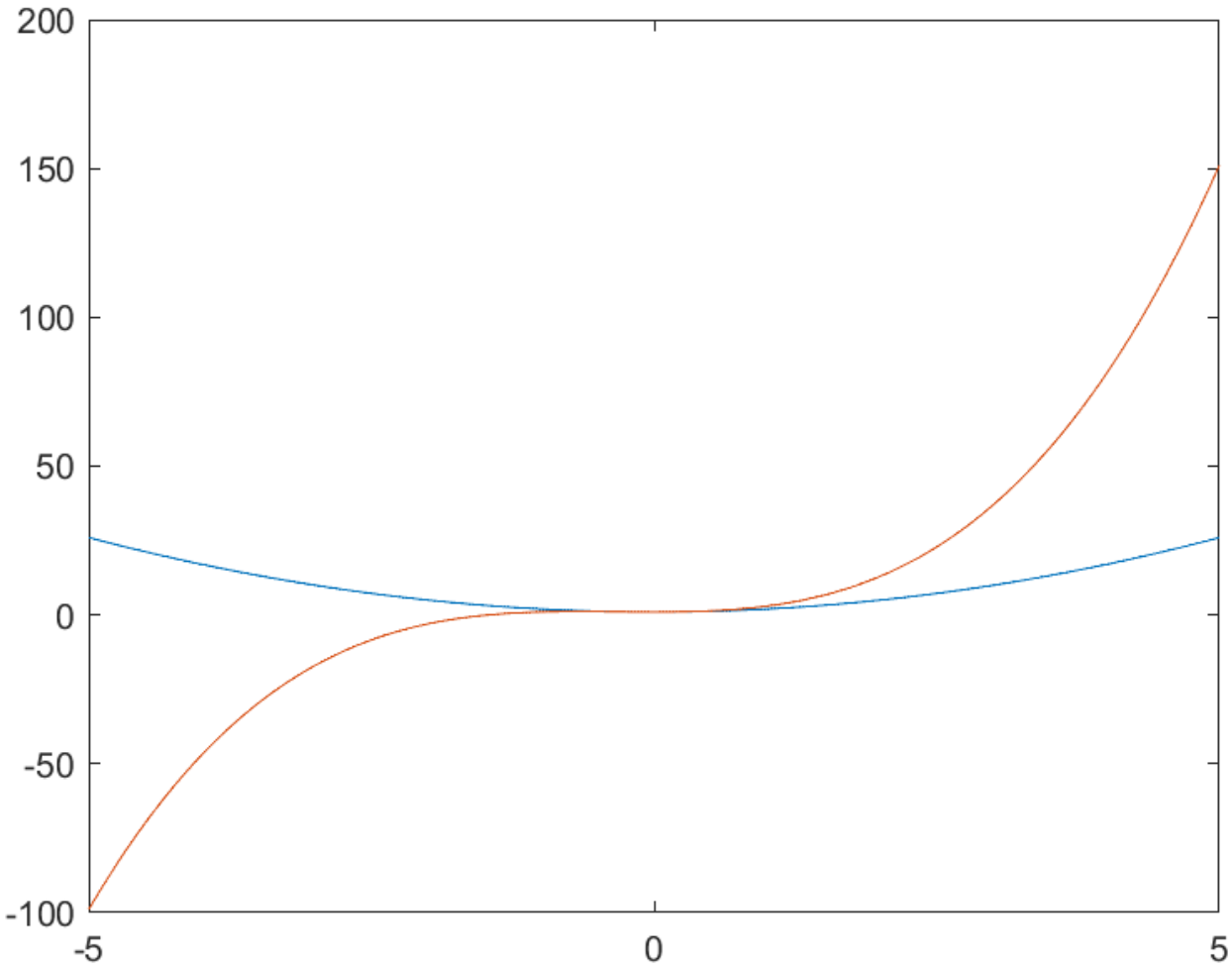
EIT, 306387, Gabriel Ćwiek, MAPT 2, lab 8, https://github.com/Astaree/MAPT_2

Ex. 0

a. Clc, clearvar – deletes all from console and variables
b. Declare matrix a 2x3
c. Check size of matrix 2x3
d. Declare sA var holding size of A
e. Declare 2 var rows and columns holding amount of them in A
f. Declare sAr = rows in A (amount)
g. Declare sAc = columns in A (amount)

Ex. 1



<-script

```
x = -5:0.01:5;
p1 = plot1(x);
p2 = plot2(x);
plot(x,p1,x,p2);
```

<-

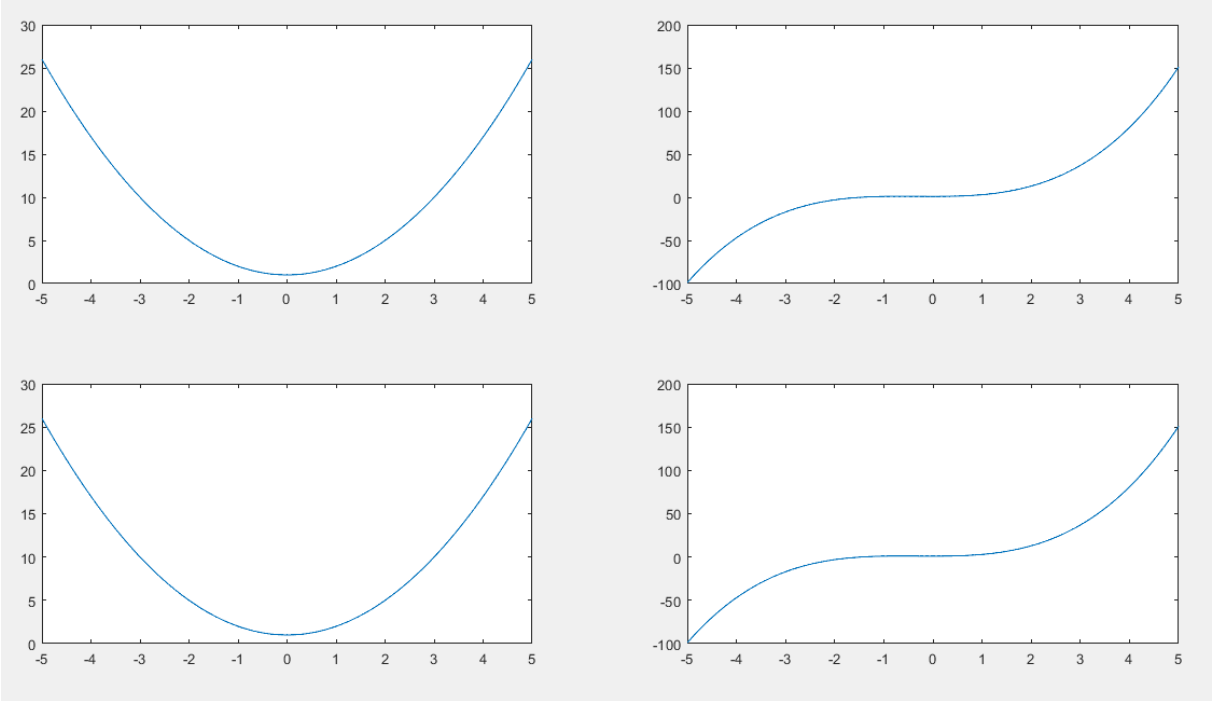
plot1

```
function [outputArg1] = plot1(x)
%UNTITLED3 Summary of this function goes here
%   Detailed explanation goes here
outputArg1 = x.^2 + 1;
end
```

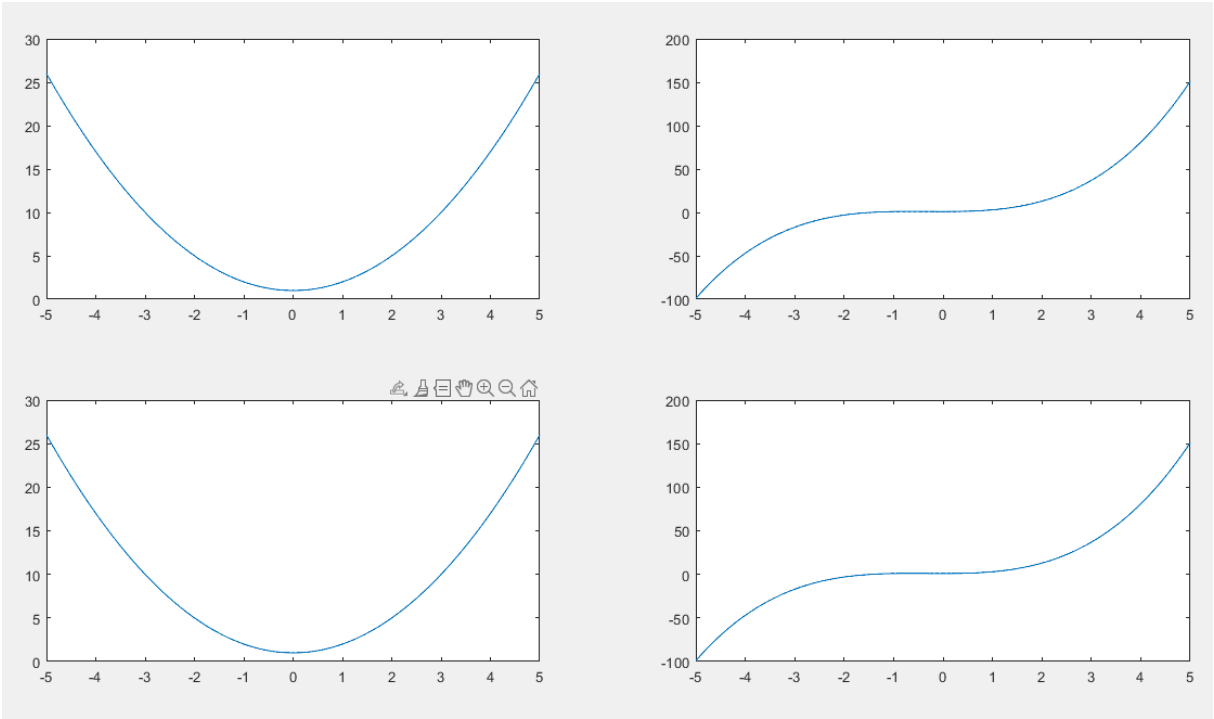
<-plot2

```
function [outputArg1] = plot2(x)
%UNTITLED4 Summary of this function goes here
%   Detailed explanation goes here
outputArg1 = x.^3+x.^2+1;
end
```

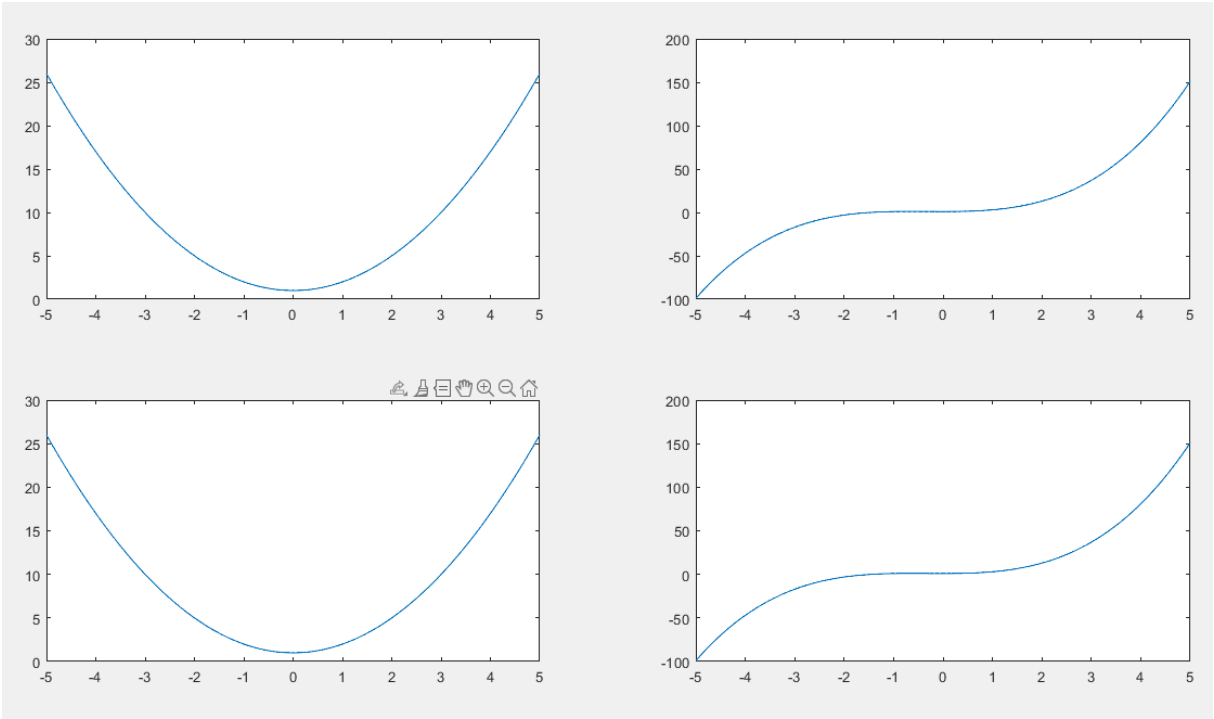
Ex.2 - There is no visible difference between plots generated this way



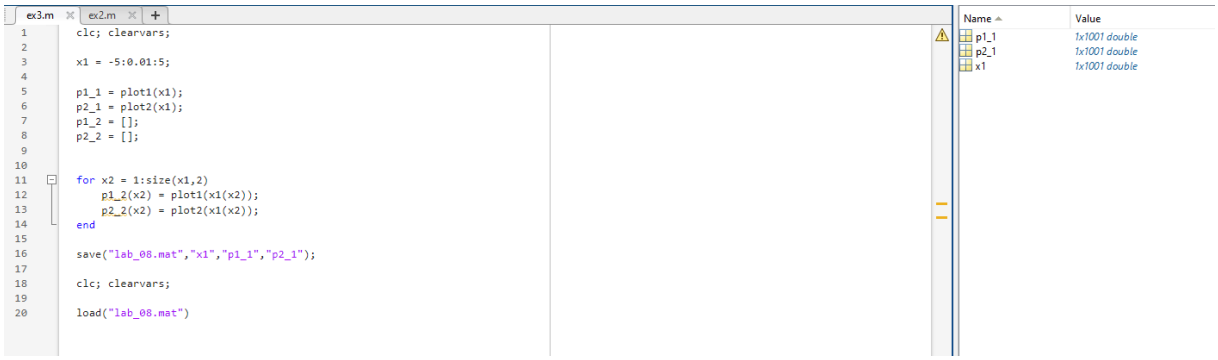
Ex. 2a - There is no visible difference between plots generated this way



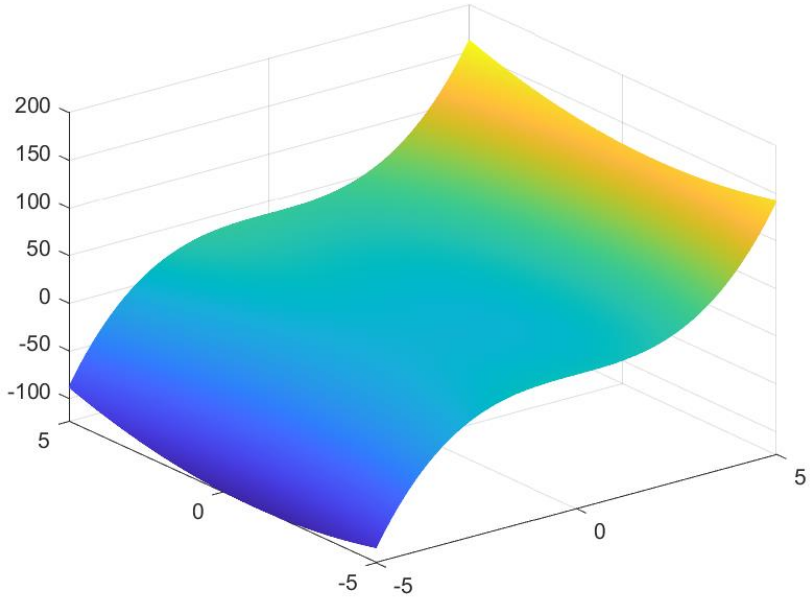
Ex. 2b - There is no visible difference between plots generated this way



Ex3 – it just works



Ex4 – it generates mesh




```
x = -5:0.01:5;
y = -5:0.01:5;

[z] = plotXY(x,y);

mesh(x,y,z);
print("mesh.png","-dpng");
```

```
% func1
function [z] = plotXY(x,y)
[x1,y1] = meshgrid(x,y);
z = x1.^3 + (y1+1).^2 +1;
end
```