

**Open the MatLab software.**

**It has three kind of windows:** Command window; Command space; Command history.  
There is also an Editor, where the programs are usually written.

**The file has to be written in the MatLab Editor. This is an example of a simple MatLab program.**

```
function [y] = Ex(f, a, kmax)
% f is an inline function
x(1)=a;
    for k =2:kmax
        x(k)=x(k-1)+a
        y(k)=f(x(k))+x(k)^2-3;
        b=a+k;
    end
output = [b, y(kmax)]
disp('this is the answer')
disp (output)
```

**Then go to the “File” menu and save it as an “.m” file whose name is the same as the name of your function. Save the file in a folder selected by you.**

**For the above example the file must be saved as: Ex.m .**

**The function name must be copied in the Command window.**

```
function [y] = Ex(f, a, kmax)
```

**Replace “f” with a particular function as shown below:**

inline' write here the function';

**Replace a:** with a number;

**Replace kmax (this shows the maximum number of iterations):** with a number.

Press Enter.

**See the example below**

```
[y] = Ex(inline ('x^3+1'), -3, 10)
```

Or

```
Ex(inline ('x^2-3'), 3, 10)
```

**The output you will receive in the command window is the following:**

output =

```
7    -30   -26102
```

this is the answer

ans =

Columns 1 through 5

0    -182    -650    -1586    -3152

Columns 6 through 10

-5510    -8822    -13250    -18956    -26102

In order to write and/or understand your programs it is necessary for you to have a basic knowledge about programming. You have to know what is this a “loop” and “if” operator. There are different kinds of loops.

A basic knowledge about the MatLab syntax used to write programs, and other useful info about programming in MatLab is given on P31-P40 of your textbook. There are given also multiple simple examples. My recommendation is to code and play with these examples before you start working on your first programming assignment. This assignment is expected to be given approximately a week after the beginning of the semester.

My advice to you is, take the programming assignments seriously.

If you have syntax and/or Matlab programs running questions you may ask me or my TA for help.