



# 5.1 Description of the program

Choices left to the user:

1. Explain the program
2. Define the limits of the plot
3. Draw a user defined ellipsis
4. Load a file with ellipsis and draw them
5. Ask for the resolution of the plot
6. Clean up the figure
7. Exit

Instructions:

- Organise your program in a main script and several functions
- Use functions stored in .m files
- Document your functions and the main program

MATLAB and Octave for beginners

Here we are with the last session. It is dedicated to the construction of a small program. We first define the required features which allow us to describe the functions that must be implemented. A good structures allows us to organize the development from the beginning into several clear and easy tasks to write. Here is the description of the program we would like to write. This program must give the user a choice among 7 possibilities. The last, the 7th exits the program. The first explain the program itself. That is, tell the user all the choices he has available. The second is to define the limits of the figure. We would like to have a figure and draw one or more ellipses. Therefore, step 2 is to define the limits of the figure. The maximum X, the maximum Y, the minimum X, the minimum Y. The third option is to draw an ellipse defined by a user. An ellipse is defined by it's center and it's main axis. This is what the user should plot before drawing the ellipse. The fourth step is to load the ellipses file and draw. So what is it? We provide a file with multiple ellipses inside. You should load this file into a matrix and then draw all ellipses. The fifth step is to request the accuracy of the drawing.

Notes

Summary



0m 04s

## 5.1 Description of the program

Choices left to the user:

1. Explain the program
2. Define the limits of the plot
3. Draw a user defined ellipsis
4. Load a file with ellipsis and draw them
5. Ask for the resolution of the plot
6. Clean up the figure
7. Exit

Instructions:

- Organise your program in a main script and several functions
- Use functions stored in .m files
- Document your functions and the main program

MATLAB and Octave for beginners

We have seen that to draw a curve you must give some points and then we can draw. So we ask the user to set the precision. By default we use 200 points. The sixth step is to clear the figure. So in summary this program should offer the possibility to the user to define multiple ellipses, to draw them all in a figure and then clean from time to time the figure if he wants to start over. As for the guidelines, you should organize your program in a main program written into a script and then the other functionalities into separate functions. The main script will call these functions. Remember to document the functions and the main program.

Notes

Summary



1m 33s