

Last login: Fri May 24 09:41:13 on ttys000

```
air:~ roberto$ octave
GNU Octave, version 3.6.4
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```

Octave was configured for "x86_64-apple-darwin12.3.0".

Additional information about Octave is available at <http://www.octave.org>.

Please contribute if you find this software useful.
For more information, visit <http://www.octave.org/get-involved.html>

Read <http://www.octave.org/bugs.html> to learn how to submit bug reports.

For information about changes from previous versions, type 'news'.

```
octave:1> clear
octave:2> clc
octave:3> num = [0 1]; den = [1 0];
octave:4> sistema = tf(num, den)
```

Transfer function 'sistema' from input 'u1' to output ...

$$y1: \frac{1}{s}$$

Continuous-time model.
octave:5> w = logspace(-2, 3, 100);
octave:6> bode(sistema, w)
Fontconfig warning: ignoring UTF-8: not a valid region tag
octave:7> nyquist(sistema)
octave:8> num = [1 0]; den = [0 1];
octave:9> sistema = tf(num, den)

Transfer function 'sistema' from input 'u1' to output ...

$$y1: s$$

Continuous-time model.
octave:10> nyquist(sistema)
octave:11> num = [1 0]; den = [1 1];
octave:12> sistema = tf(num, den)

Transfer function 'sistema' from input 'u1' to output ...

$$y1: \frac{s}{s + 1}$$

Continuous-time model.
octave:13> num = [0 1]; den = [1 1];
octave:14> sistema = tf(num, den)

Transfer function 'sistema' from input 'u1' to output ...

$$y1: \frac{1}{s + 1}$$

Continuous-time model.
octave:15> nyquist(sistema)
octave:16> bode(sistema, w)
octave:17> nyquist(sistema)
octave:18> num = [1 1]; den = [0 1];
octave:19> sistema = tf(num, den)

Transfer function 'sistema' from input 'u1' to output ...

$$y1: s + 1$$

Continuous-time model.
octave:20> bode(sistema, w)
octave:21> nyquist(sistema)
octave:22> num = [0 0 1]; den = [1 0.2 1];
octave:23> sistema = tf(num, den)

Transfer function 'sistema' from input 'u1' to output ...

$$y1: \frac{1}{s^2 + 0.2 s + 1}$$

Continuous-time model.
octave:24> bode(sistema, w)
octave:25> nyquist(sistema)
octave:26> axis([-6 6 -6 6])
octave:27> num = [1 0.2 1]; den = [0 0 1];
octave:28> sistema = tf(num, den)

Transfer function 'sistema' from input 'u1' to output ...

$$y1: s^2 + 0.2 s + 1$$

Continuous-time model.
octave:29> nyquist(sistema)
octave:30> bode(sistema, w)
octave:31> nyquist(sistema)
octave:32> %Ejemplo
octave:32> num = [0 0 1]; den = [1 1 0];
octave:33> sistema = tf(num, den)

Transfer function 'sistema' from input 'u1' to output ...

$$y1: \frac{1}{s^2 + s}$$

Continuous-time model.
octave:34> bode(sistema, w)

```
octave:35> nyquist(sistema)
octave:36> axis([-1.5 0.5 -20 20])
octave:37> ww = 0.1:0.1:100;
octave:38> nyquist(sistema,ww)
octave:39> axis([-1.5 0.5 -20 20])
octave:40> ww = 0.1:0.1:1000;
octave:41> nyquist(sistema,ww)
octave:42> axis([-1.5 0.5 -20 20])
octave:43>
```