

# Example (1/2)

- Here we show code to generate a matlab script for drawing the mesh. First you write data as matlab arrays, like this
  - `std::ofstream script;`
  - ....
  - `script << "close all;" << std::endl;`
  - `script << "clear all;" << std::endl;`
  - `script << "clc;" << std::endl;`
  - `script << "T_" << count << " = " << matlab_write_mesh(triangles) << ";" << std::endl;`
  - `script << "px_" << count << " = " << util::matlab_write_vector( px ) << ";" << std::endl;`
  - `script << "py_" << count << " = " << util::matlab_write_vector( py ) << ";" << std::endl;`
- Here “count” is supposed to be a integer variable that counts the number of frames that you have generated to far.

# Example (2/2)

- Next you must generate script code for making a matlab figure. That could look like this
  - `script << "figure('Visible','off');" << std::endl;`
  - `script << "clf;" << std::endl;`
  - `script << "triplot(T_" << count << ",px_" << count << ",py_" << count << ", 'b');" << std::endl;`
  - `script << "xlabel('x');" << std::endl;`
  - `script << "ylabel('y');" << std::endl;`
  - `script << "title('Computational Mesh');" << std::endl;`
  - `script << "print(gcf, '-depsc2', " << "mesh_" << std::setw(8) << std::setfill('0') << count << ");" << std::endl;`
- More advanced matlab scripts can be observed in various demos.