Casadi - Important commands 1

- `import casadi.*`
  This command is necessary at the beginning of your script. Imports the Casadi toolbox.
- `opti = casadi.Opti()`
  Creates a new optimization problem called 'opti'.
- `opti.solver('ipopt')`
  Chooses the `ipopt` solver for the optimization problem.
- `x = opti.variable(m,n)`
  Declares 'x' as a matrix decision variable of size $m \times n$.
- `p = opti.parameter(m,n)` and `opti.set_value(p,value)`
  Declares 'p' as a parameter of size $m \times n$ and sets $p =$ value.

Casadi - Important commands 2

- `opti.subject_to(...)`
  Adds constraints to the optimization problem. You may declare element-wise (in)equalities for vectors, nonlinear constraints and multiple constraints at once. Each command adds another constraint to the optimization problem and does not replace old ones.

- `opti.minimize(...)`
  Declares the objective / cost function.

- `opti.set_initial(x,value)`
  Provides an initial guess for the optimization variable 'x'.

- `sol = opti.solve()`
  Solves the optimization problem.

- `x_solution = sol.value(x)`
  Retrieves the solution of the optimization problem.