

## Course Project

Maximum number of students: 4

Due date: 27 Mar. 2017

### Project description

Build a script (by using MATLAB or your favorite programming language) that gives the following outputs for RRR planer robot:

- 1) The **robot working area** (Links' lengths and joints' ranges are the input data provided by the user).
- 2) The **inverse kinematic** solution for joints' angles (Links' lengths,  $a$ ,  $b$  and  $\theta$  for end effector are the input data provided by the user).
- 3) The value of **maximum torque** at each robot joint that hold a given load  $[F_x \ F_y \ M]^T$  on the robot end effector. (Links' lengths, joints' ranges and external load are the input data provided by the user)

**The program should read all input data from a text file.**