1 Description of the system

The considered system is represented in figure 1 and consist of five bars. Each body has a length of 1 m and a mass of 1 kg. Body 1 is attached to the ground by a revolute joint of horizontal axis. Bodies 1, 2 and 3 are attached all together by the same revolute joint. Bodies 4 and 5 are attached respectively to bodies 2 and 3 by another revolute joints. Initial conditions are given on the figure.
2 Requested results

The system is of course symmetrical. So it is asked to verify by simulation that the results are symmetrical.

3 Typical results

Figure 2 to figure 4 show the expected behaviour.

![Evolution of configuration parameters](image)

**Fig. 2 – Evolution of configuration parameters**
Fig. 3 – Evolution of first time derivatives of configuration parameters

Fig. 4 – Evolution of second time derivatives of configuration parameters