Labo 2: Ladder Diagrams & GRAFCET

The activation of the GRAFCET step can be represented in the Ladder diagram using one sequential memory block (SR) : 0 indicating that the state is not active and 1 when it is active. The synthesis of such specification consists in determining the control functions of the SR FF.

Exercice 1.   Construct a linear GRAFCET with 5 different steps using Ladder Diagram. Choose inputs and actions freely.

Exercice 2.   Using ladder diagrams construct the problem for a GRAFCET shown on Figure 1: Choose inputs and actions freely.
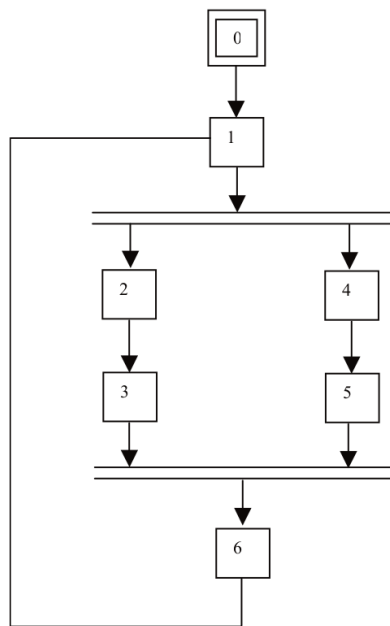

Figure 1: GRAFCET to be made using Ladder diagram.

Exercice 3.   Implement a traffic light using GRAFCET (SFC). First build a single traffic light that will switch between green, orange and red automatically using timers. Then add a second one that controls a perpendicular road. They thus can't be green at the same time.