

## ELEC-H-516 — Programmable Logic Controllers

### EX2 — Ladder Diagrams & GRAFCET

Dragomir MILOJEVIC

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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.

#### Exercise 1

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

#### Exercise 2

Using ladder diagrams construct the problem for a GRAFCET shown on figure : Choose

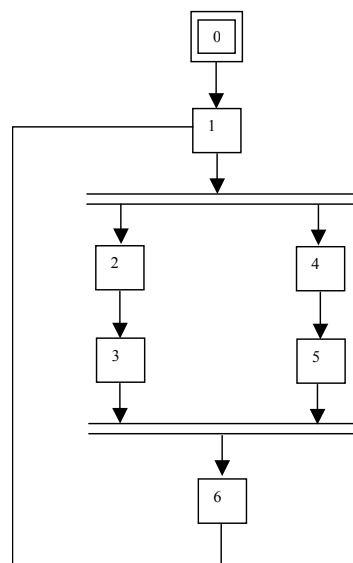


Figure 1: GRAFCET to be made using Ladder diagram

inputs and actions freely.

#### Exercise 3

From the PDF manual take the example of the traffic light and implement the control using SFC.