

17

*Pedestrian Crossing
Simulation*

Programming Exercises

- 17.1** *There is a 'bug' in the pedestrian crossing: if a pedestrian request button is pressed whilst the pedestrian lights are green or flashing green the button lights up 'WAIT' but causes no sequencing. We believe that a button press on pedestrian green should do nothing and a button press on flashing should schedule a new sequencing-flashing green means pedestrians should not start crossing, they should only start on green. Implement this bug fix.*
- 17.2** *Undertake Direction 1 of the fifth round of development reworking the use of threads so as to get more accuracy to the switching on and off of the lights.*
- 17.3** *Undertake the development of a simulation of a right-hand-drive crossroads where the up traffic stream has a left filter.*

Challenges

- 17.1** *Investigate the subject of Discrete Event Simulation and do the initial design of a full simulation with animation of the vehicles in the pedestrian crossing simulation.*