

## HANDOUT #8

### ALGORITHM for Traffic Light / Pedestrian Co-ordination

#### Pseudo-code

Last Week's Pedestrian Crossing	This Week – Must coordinate with Traffic Light
<ol style="list-style-type: none"><li>1. RED LIGHT ON</li><li>2. WAIT FOR BUTTON TO BE PRESSED</li><li>3. WHEN BUTTON IS PRESSED run greenman()</li></ol> <pre>def greenman():</pre> <ol style="list-style-type: none"><li>4. WAIT 10 SECONDS</li><li>5. RED LIGHT GOES OFF, GREEN LIGHT COMES ON</li><li>6. BUZZER BUZZ SLOWLY</li><li>7. ALLOW 15 SECONDS FOR PEDESTRIANS TO CROSS</li><li>8. BUZZER BUZZ FASTER, SIGNIFYING THAT TIME IS COMING UP</li><li>9. GIVE 5 SECONDS GRACE PERIOD</li><li>10. GREEN LIGHT GOES OFF, RED LIGHT COMES ON</li></ol>	<ol style="list-style-type: none"><li>1. PEDESTRIAN RED LIGHT ON</li><li>2. <b>TRAFFIC LIGHT GREEN LIGHT ON</b></li><li>3. WAIT FOR BUTTON TO BE PRESSED</li><li>4. WHEN BUTTON IS PRESSED – RUN greenman()</li></ol> <pre>def greenman():</pre> <ol style="list-style-type: none"><li>5. <b>TRAFFIC LIGHT GREEN LIGHT OFF</b></li><li>6. <b>TRAFFIC LIGHT AMBER BLINKS 10 SECONDS</b></li><li>7. <b>TRAFFIC LIGHT RED LIGHT ON</b></li><li>8. PEDESTRIAN RED LIGHT OFF</li><li>9. PEDESTRIAN GREEN LIGHT ON</li><li>10. GIVE 10 SECONDS FOR PEDESTRAIN TO CROSS</li><li>11. START THE COUNTER FROM 9 TO 0</li><li>12. EACH COUNT IS 1 SECOND</li><li>13. BUZZER BLINK</li><li>14. PEDESTRAIN GREEN LIGHT BLINK</li><li>15. AFTER COUNTER REACHES 0</li><li>16. PEDESTRAIN GREEN LIGHT OFF</li><li>17. PEDESTRAIN RED LIGHT ON</li><li>18. <b>TRAFFIC LIGHT RED OFF</b></li><li>19. <b>TRAFFIC LIGHT GREEN ON</b></li></ol>