

# PROGRAMMING INPUTS AND OUTPUTS

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On behalf of The World Association of Technology Teachers

## W.A.T.T.



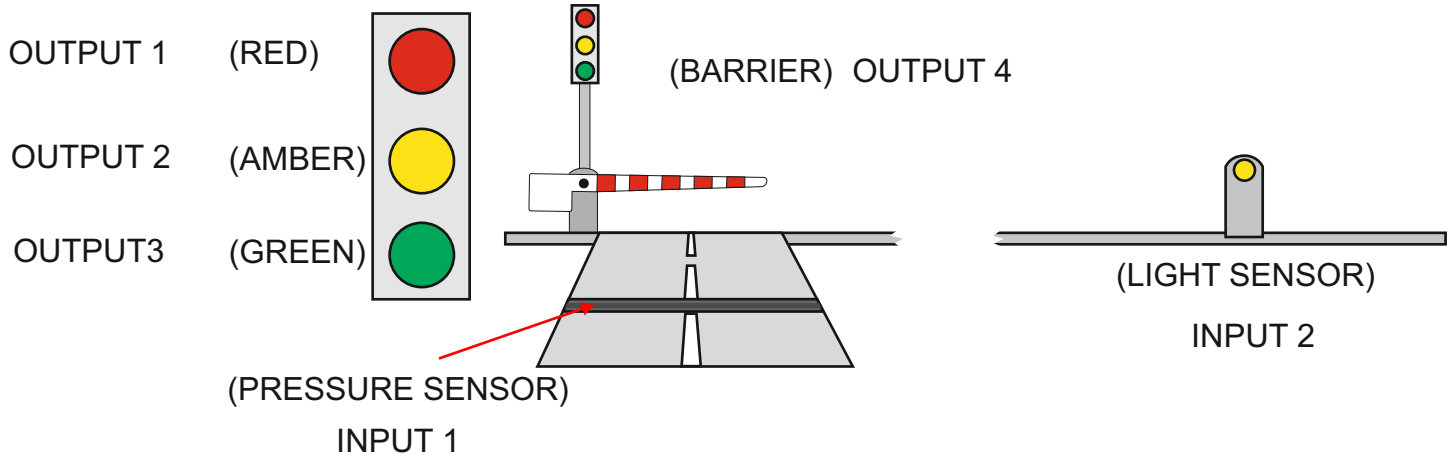
World Association of Technology Teachers

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# PROGRAMMING INPUTS AND OUTPUTS

The traffic control system shown below has INPUTS and OUTPUTS. Each input and output has a number - these are listed on the diagram below.



Write the control sequence for the following sequence of events: Please note, when the barrier is raised/open it is 'ON'. When the barrier is lowered/closed it is 'OFF'. The first five stages have already been completed.

TRAFFIC LIGHT - RED  
 BARRIER IN CLOSED POSITION  
 INPUT 1 AND INPUT 2 OFF  
 TRAFFIC LIGHTS RED + AMBER ON  
 WAIT 5 SECONDS  
 TRAFFIC LIGHTS - RED + AMBER OFF  
 TRAFFIC LIGHTS GREEN ON  
 BARRIER OPENS  
 WAIT 60 SECONDS  
 TRAFFIC LIGHTS - GREEN OFF  
 TRAFFIC LIGHTS - AMBER ON  
 WAIT FIVE SECONDS  
 TRAFFIC LIGHTS - AMBER AND RED ON  
 WAIT 5 SECONDS  
 TRAFFIC LIGHTS - AMBER OFF  
 BARRIER LOWERED.

OUTPUT 1 ON \_\_\_\_\_

OUTPUT 4 OFF \_\_\_\_\_

IF INPUT 1 OFF AND OUTPUT 2 OFF \_\_\_\_\_

OUTPUT 1 AND OUTPUT 2 ON \_\_\_\_\_

WAIT 5 \_\_\_\_\_

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Suggest two improvements to the traffic control system shown in the diagram above.

1. \_\_\_\_\_

\_\_\_\_\_

2. \_\_\_\_\_

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