Lab 10

P1: To Interface an elevator to 8086 Microprocessor through 8255 Programmable Peripheral Interface (PPI).

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Observation:

The 10 lights represent the motion of the elevator. The delay between switching off one LED and turning on adjacent LED represents the speed of the lift. The service request is read through flip flops of port B. The corresponding light for the key pressed lights up and is reset (switches off) when elevator comes up to that level (in other words when flip flops are reset).

Output:

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| Lift going from 0 to 3 | Lift going from 3 to 0 |

P1: To Interface a traffic light to 8086 Microprocessor through 8255 Programmable Peripheral Interface (PPI).

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Observation:

This board has 6 LED lights at each of its 4 corners; total 24, all ports are used as output ports. The six lights are Red, Amber, left, right, straight and pedestrian.

First five LEDs glow when they receive active high input and turn off on active low. Pedestrian light glows red on active high and green on active low.

The pedestrian light for a particular corner would only glow red when left right and centre are green for that corner and would glow green otherwise. A pedestrian should only cross when two adjacent pedestrian lights are glowing green and wait otherwise.

The traffic coming from one direction is guided by the lights in the opposite direction.

Output:

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