Part 1 Decoder - design of sprinkler valve controller

Part 2 Multiplexer - design of computer data bus

Part 1 guided design

Part 2 individual design

* Get familiar with eda playground environment
* Simulation and design of controller systems around combinational logic
* Generation of testbenches for logic and design testing and verification
* Generation of waveforms

Sprinkler: control the opening and closing of different valves in different zones (only one zone can have the sprinkler on at a time)

Assume a microcontroller has only 4 output pins a system based on a 3 x 8 decoder with enable switch should perform fine