The idea our team came up with is to create an elevator, with let’s say floor. We could use an adder to add up which floor we are at. We could have a button inside the elevator which you press to decide to which floor you go to. Whichever floor is clicked we go to that floor and lets say we have a **counter** (**8 SEGMENT DISPLAY)** in there (also just to incorperate what we've learned) that stays at the floor for lets say 5 seconds bef ore moving on.

Full adder for adding up which floor, a delayed counter or clock to time how long it stays at each floor. What we want to do is use the board to input which floor to go to and also on the 8 segment maybe count down from 5 to 0, for every floor we stay on (stay on floor for 5 secs)

OPTIONAL: Elevator music, using MUX.

<https://www.youtube.com/watch?v=wFwTJ9aAbgM>

<https://www.youtube.com/watch?v=gB6wGilsgbI>

Provide a 1 paragraph description of your project:

What do you plan to have completed by the end of the first lab session?:

* 4 floor structure (building & assembling)
* **Simple counter** counting from 5 to 0, on each floor it goes to.
* **2 HEX SEG Displays** - HEX Display for the 5 to 0, as well as the floor number we are on.
  + Putting input onto the hex
* physically using motor to move it up and down

What do you plan to have completed by the end of the second lab session?:

* Middleware Connection – operating using Verilog/DE2/Mindstorm.
* Sensor for each level – to detect where we are at (We could also use a simple 2 second delay, as it will be enough to go to level to level).
* **MUX** for saying the number as it reaches each floor

What do you plan to have completed by the end of the third lab session?:

* **Counter** as it goes from floor to floor, pauses on floor we are at.
  + Replacing the simple floor display we made earlier.

What is your backup plan if things don’t work out as planned?

What hardware will you need beyond the DE2 board (be sure to e-mail Brian if it’s anything beyond the basics to make sure there’s enough to go around)