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Question 1:

**Do any false transitions get through to the LED? Why? If so, why don't you see the LED flicker?**

Yes, there are false transitions through the LED, because momentary switch inputs are asynchronous but are not electrically clean. In other words, a single click of switch might creates multiple electrical transition. The false transitions are negligible in our case, because it will not prevent signal jump from low to high when we press the switch. We can still see the LED flicker.

Question 2:

**Do the transitions on pin 13 change? Why?**

Yes. Because there is bounce when user press the switch and it is due to design of momentary switch.

Question 3:

**Are the transitions on pin 13 any different? If so, please describe.**

Yes, the signal becomes smooth, in other words, there is no false transitions exist.

Question 4:

**What are the limits to the size of the cube? How small can you still discern it to be a spinning cube? What is the largest size where it is still identifiable as a cube?**

We change the size of the cube by multiply each coordinate with ‘var’, which is the analog reading from potentiometer divided by 100.0. When ‘var’ is smaller than 0.05, we can’t tell it is a spinning cube. When ‘var’ is greater than 5, we can’t identify it as a cube.