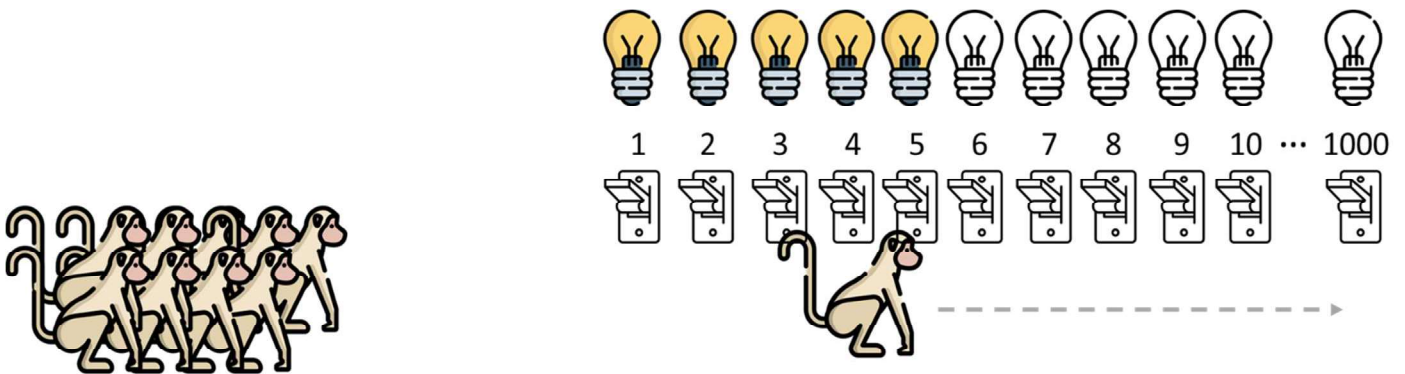


# Monkey Business

A large room has 1000 lightbulbs in it, all are switched off, but each has its own switch to turn on. 1000 monkeys enter the room and decide to press the light switches in a very particular way.



The 1<sup>st</sup> monkey presses every multiple of 1.  
The 2<sup>nd</sup> monkey presses every multiple of 2.  
The 3<sup>rd</sup> monkey presses every multiple of 3.  
Etc., until the 1000<sup>th</sup> monkey.

After all the monkeys have finished pressing switches:

1. Will light number 10 be on or off?
2. How many lights in total will be on?