

Write a **ThreeWayLamp** class that models the behavior of a lamp that uses a three-way bulb. These bulbs have actually four possible states: off, low light, medium light, and high light. Each time the switch is activated, the bulb goes to the next state (from high, the next state is off, from off to low etc). The **ThreeWayLamp** class has a single method called **switch()** which takes a single int parameter indicating how many times the switch is activated. (you need to throw an