**class** TrafficLight  
{

**private $lights**;  
**private $code**;  
**private $active;**

**public function** \_\_construct($code)  
 {

$this->**code** = $code;  
$this->**active** = **true**;  
$this->**lights** = [  
 **'red'** => 1,  
 **'orange'** => 0,  
 **'green'** => 0,  
];

**return** $this->**code**;

}

**public function** switchOn($color)  
 {

**if** ($this->**active** === **false**) {  
 **return**;  
}  
**if** (!$this->isValidColor($color)) {  
 **echo 'Ik heb geen licht met de kleur: '** . $color . **"\n"**;  
 **return**;  
}  
  
$this->**lights**[$color] = 0;

}  
  
 **public function** switchOff($color)  
 {

$this->**active** = **false**;  
$this->switchAllLightsOff()

}

**public function** deactivateTrafficLight()  
 {  
$this->switchAllLightsOff();  
$this->**lights**[$color] = 1;  
 }

**public function** activateTrafficLight()  
 {

$this->**active** = **true**;  
$this->switchOn(**'red'**);

}

**public function** getCode()  
 {  
 return $this->**code;**  
 }  
  
 **public function** showLightStatus()  
 {

**echo 'Status van Stoplicht '** . $this->**code** . **":\n"**;  
  
**if** ($this->**active** === **true**) {  
 **foreach** ($this->**lights as** $color => $status) {  
 **echo** $color . **' --> '** . $status . **"\n"**;  
 }  
} **else** {  
 **echo 'Stoplicht inactief: oranje knippert'** . **"\n"**;  
}

}

**private function** isValidColor($color)  
 {

$validColors = [**'red'**, **'orange'**, **'green'**];  
**if** (*in\_array*($color, $validColors)) {  
 **return true**;  
} **else** {  
 **return false**;

}

}

**private function** switchAllLightsOff()  
 {

**foreach** ($this->**lights as** $color => $status) {  
 $this->**lights**[$color] = 0;

}

}  
}