

Class Lamp

```
public class Lamp
```

Implements an abstraction of a Lamp of three light intensities

Version:

1.0

Author:

(your name)

Constructor Summary

Constructors	
Constructor	Description
Lamp ()	default constructor
Lamp (int level)	constructor

Method Summary

All MethodsInstance MethodsConcrete Methods		
Modifier and Type	Method	Description
int	currentLevel ()	accessor: Query the current intensity of the Lamp
boolean	isLit ()	accessor: Query the Lamp to determine if it is lit
void	setIntensity (int level)	mutator: Set the intensity the Lamp
void	toggle ()	mutator: Toggle the Lamp

Constructor Detail

Lamp

```
public Lamp()
```

default constructor

The initial state is Lamp off at intensity zero

Lamp

```
public Lamp(int level)
```

constructor

The initial state is Lamp on at intensity level

Parameters:

level - 0 <= level <= 3, else intensity is set to 1

Method Detail

toggle

```
public void toggle()
```

mutator: Toggle the Lamp

If the Lamp is on, turn it off; if off, turn it on.

setIntensity

```
public void setIntensity(int level)
```

mutator: Set the intensity the Lamp

Parameters:

level - 0 <= level <= 3

currentLevel

```
public int currentLevel()
```

accessor: Query the current intensity of the Lamp

Returns:

int

isLit

```
public boolean isLit()
```

accessor: Query the Lamp to determine if it is lit

Returns:

boolean