**Output:**

C:\Users\mahal\OneDrive\Desktop\21324>javac -d . com\smarthome\system\\*.java

C:\Users\mahal\OneDrive\Desktop\21324>java com.smarthome.system.Main

Commands: 1.Add 2.Remove 3.Status 4.Control 0.Exit

Choice: 1

Device ID: 123

Device Type (LIGHT, THERMOSTAT, DOOR): light

Observer: Device added: 123

Commands: 1.Add 2.Remove 3.Status 4.Control 0.Exit

Choice: 1

Device ID: 121

Device Type (LIGHT, THERMOSTAT, DOOR): light

Observer: Device added: 121

Commands: 1.Add 2.Remove 3.Status 4.Control 0.Exit

Choice: 4

Enter Device ID to control: 123

Turn (ON/OFF): on

Device 123 turned ON via proxy.

Commands: 1.Add 2.Remove 3.Status 4.Control 0.Exit

Choice: 3

Light 123 is On

Light 121 is Off

Commands: 1.Add 2.Remove 3.Status 4.Control 0.Exit

Choice: 4

Enter Device ID to control: 121

Turn (ON/OFF): on

Device 121 turned ON via proxy.

Commands: 1.Add 2.Remove 3.Status 4.Control 0.Exit

Choice: 3

Light 123 is On

Light 121 is On

Commands: 1.Add 2.Remove 3.Status 4.Control 0.Exit

Choice: 2

Device ID to remove: 121

Observer: Device removed: 121

Commands: 1.Add 2.Remove 3.Status 4.Control 0.Exit

Choice: 3

Light 123 is On

Commands: 1.Add 2.Remove 3.Status 4.Control 0.Exit

Choice: 0

Exiting Smart Home System.