```java
//Write a Java Program to implement Facade Design Pattern for
HomeTheater


import java.util.*;



/*
//public
class EnumerationIterator implements Iterator {
        Enumeration enumeration;

        public EnumerationIterator(Enumeration enumeration) {
                this.enumeration = enumeration;
        }

        public boolean hasNext() {
                return enumeration.hasMoreElements();
        }

        public Object next() {
                return enumeration.nextElement();
        }

        public void remove() {
                throw new UnsupportedOperationException();
        }
}

//Test Drive the Enumeration Adapter
//import java.util.*;
//public
class EnumerationIteratorTestDrive {
        public static void main (String args[]) {
                Vector v = new Vector(Arrays.asList(args));
                Iterator iterator = new
EnumerationIterator(v.elements());
                while (iterator.hasNext()) {
                        System.out.println(iterator.next());
                }
        }
}

*/

package headfirst.facade.hometheater;

public class HomeTheaterFacade {
        Amplifier amp;
        Tuner tuner;
        DvdPlayer dvd;
        CdPlayer cd;
        Projector projector;
        TheaterLights lights;
        Screen screen;
        PopcornPopper popper;
```

```java
        public HomeTheaterFacade(Amplifier amp,
                                 Tuner tuner,
                                 DvdPlayer dvd,
                                 CdPlayer cd,
                                 Projector projector,
                                 Screen screen,
                                 TheaterLights lights,
                                 PopcornPopper popper) {

                this.amp = amp;
                this.tuner = tuner;
                this.dvd = dvd;
                this.cd = cd;
                this.projector = projector;
                this.screen = screen;
                this.lights = lights;
                this.popper = popper;
        }

        public void watchMovie(String movie) {
                System.out.println("Get ready to watch a movie...");
                popper.on();
                popper.pop();
                lights.dim(10);
                screen.down();
                projector.on();
                projector.wideScreenMode();
                amp.on();
                amp.setDvd(dvd);
                amp.setSurroundSound();
                amp.setVolume(5);
                dvd.on();
                dvd.play(movie);
        }


        public void endMovie() {
                System.out.println("Shutting movie theater down...");
                popper.off();
                lights.on();
                screen.up();
                projector.off();
                amp.off();
                dvd.stop();
                dvd.eject();
                dvd.off();
        }

        public void listenToCd(String cdTitle) {
                System.out.println("Get ready for an audiopile
experence...");
                lishts.on();
                amp.on();
                amp.setVolume(5);
                amp.setCd(cd);
                amp.setStereoSound();
```

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                cd.on();
                cd.play(cdTitle);
        }

        public void endCd() {
                System.out.println("Shutting down CD...");
                amp.off();
                amp.setCd(cd);
                cd.eject();
                cd.off();
        }

        public void listenToRadio(double frequency) {
                System.out.println("Tuning in the airwaves...");
                tuner.on();
                tuner.setFrequency(frequency);
                amp.on();
                amp.setVolume(5);
                amp.setTuner(tuner);
        }

        public void endRadio() {
                System.out.println("Shutting down the tuner...");
                tuner.off();
                amp.off();
        }
}


//Here is a driver that uses a Facade pattern to control many devices

public class HomeTheaterTestDrive
{
        public static void main(String[] args) {
                Amplifier amp = new Amplifier("Top-O-Line Amplifier");
                Tuner tuner = new Tuner("Top-O-Line AM/FM Tuner",
amp);
                DvdPlayer dvd = new DvdPlayer("Top-O-Line DVD Player",
amp);
                CdPlayer cd = new CdPlayer("Top-O-Line CD Player",
amp);
                Projector projector = new Projector("Top-O-Line
Projector", dvd);
                TheaterLights lights = new TheaterLights("Theater
Ceiling Lights");
                Screen screen = new Screen("Theater Screen");
                PopcornPopper popper = new PopcornPopper("Popcorn
Popper");

                HomeTheaterFacade homeTheater =
                                new HomeTheaterFacade(amp, tuner, dvd,
cd,
                                                projector, screen,
lights, popper);

                homeTheater.watchMovie("Raiders of the Lost Ark");
                homeTheater.endMovie();
```

```java
        }
}

/*

public float getTemp()
{
        Thermometer thermometer = station.getThermometer();
        return thermometer.getTemperature();
}



public float getTemp()
{
        return station.getTemperature();  //add a method in Station
that makes the request to thermometer for us
}*/
```