interface Food {

double getCost();

String getDescription();

}

// Concrete component classes

class Rice implements Food {

@Override

public double getCost() {

return 3.0;

}

@Override

public String getDescription() {

return "Rice";

}

}

class Meat implements Food {

@Override

public double getCost() {

return 5.0;

}

@Override

public String getDescription() {

return "Meat";

}

}

class Chicken implements Food {

@Override

public double getCost() {

return 6.0;

}

@Override

public String getDescription() {

return "Chicken";

}

}

// Decorator class

abstract class FoodDecorator implements Food {

protected Food food;

public FoodDecorator(Food food) {

this.food = food;

}

public double getCost() {

return food.getCost();

}

public String getDescription() {

return food.getDescription();

}

}

// Concrete decorator classes

class Chinese extends FoodDecorator {

public Chinese(Food food) {

super(food);

}

@Override

public double getCost() {

return super.getCost() + 2.0;

}

@Override

public String getDescription() {

return super.getDescription() + " Chinese";

}

}

class Biryani extends FoodDecorator {

public Biryani(Food food) {

super(food);

}

@Override

public double getCost() {

return super.getCost() + 4.0;

}

@Override

public String getDescription() {

return super.getDescription() + " Biryani";

}

}

class ChickenCurry extends FoodDecorator {

public ChickenCurry(Food food) {

super(food);

}

@Override

public double getCost() {

return super.getCost() + 3.0;

}

@Override

public String getDescription() {

return super.getDescription() + " with Chicken Curry";

}

}

class Roast extends FoodDecorator {

public Roast(Food food) {

super(food);

}

@Override

public double getCost() {

return super.getCost() + 4.0;

}

@Override

public String getDescription() {

return super.getDescription() + " Roast";

}

}

class Beef extends FoodDecorator {

public Beef(Food food) {

super(food);

}

@Override

public double getCost() {

return super.getCost() + 3.0;

}

@Override

public String getDescription() {

return super.getDescription() + " with Beef";

}

}

class Mutton extends FoodDecorator {

public Mutton(Food food) {

super(food);

}

@Override

public double getCost() {

return super.getCost() + 3.0;

}

@Override

public String getDescription() {

return super.getDescription() + " with Mutton";

}

}

class Pizza extends FoodDecorator {

public Pizza(Food food) {

super(food);

}

@Override

public double getCost() {

return super.getCost() + 8.0;

}

@Override

public String getDescription() {

return super.getDescription() + " Pizza";

}

}

class Burger extends FoodDecorator {

public Burger(Food food) {

super(food);

}

@Override

public double getCost() {

return super.getCost() + 6.0;

}

@Override

public String getDescription() {

return super.getDescription() + " Burger";

}

} public class Main {

public static void main(String[] args) {

// Creating base food items

Food rice = new Rice();

Food meat = new Meat();

Food chicken = new Chicken();

// Decorating food items

Food chineseRice = new Chinese(new Rice());

Food biryaniRice = new Biryani(new Rice());

Food chickenCurry = new ChickenCurry(new Chicken());

Food roastMeat = new Roast(new Meat());

Food beefMeat = new Beef(new Meat());

Food muttonMeat = new Mutton(new Meat());

Food pizzaFastFood = new Pizza(new FastFood());

Food burgerFastFood = new Burger(new FastFood());

// Output

System.out.println("Cost: " + rice.getCost() + ", Description: " + rice.getDescription());

System.out.println("Cost: " + meat.getCost() + ", Description: " + meat.getDescription());

System.out.println("Cost: " + chicken.getCost() + ", Description: " + chicken.getDescription());

System.out.println("Cost: " + chineseRice.getCost() + ", Description: " + chineseRice.getDescription());

System.out.println("Cost: " + biryaniRice.getCost() + ", Description: " + biryaniRice.getDescription());

System.out.println("Cost: " + chickenCurry.getCost() + ", Description: " + chickenCurry.getDescription());

System.out.println("Cost: " + roastMeat.getCost() + ", Description: " + roastMeat.getDescription());

System.out.println("Cost: " + beefMeat.getCost() + ", Description: " + beefMeat.getDescription());

System.out.println("Cost: " + muttonMeat.getCost() + ", Description: " + muttonMeat.getDescription());

System.out.println("Cost: " + pizzaFastFood.getCost() + ", Description: " + pizzaFastFood.getDescription());

System.out.println("Cost: " + burgerFastFood.getCost() + ", Description: " + burgerFastFood.getDescription());

}

}