**Файл MainClass.java**

package furniturestore;

import furniturestore.fobject.fixed.Chair;

import furniturestore.fobject.fixed.Table;

import furniturestore.fobject.soft.Sofa;

import furniturestore.fobject.soft.SoftChair;

import furniturestore.order.Order;

public class MainClass {

public static void main(String[] args) {

// TODO code application logic here

Order order=new Order();

Chair chair=new Chair();

Table table=new Table();

Sofa sofa=new Sofa();

SoftChair softChair=new SoftChair();

sofa.setModel("Пиринея");

sofa.setCost(420);

sofa.setPacking("Велюр");

sofa.setSheathing("Синтепон");

sofa.setArmset();

chair.setCost(125);

chair.setMaterial("Дерево");

chair.setMaxWeight(150);

chair.setModel("Сенатор");

table.setCost(240);

table.setForma("круглый");

table.setMaterial("дерево");

table.setModel("иллиноис");

softChair.setCost(270);

softChair.setModel("ирис");

softChair.setPacking("синтепон");

softChair.setSheathing("гипюр");

order.addFurniture(sofa);

order.addFurniture(chair);

order.addFurniture(table);

order.addFurniture(softChair);

order.printOrder();

order.countPrice();

order.printOrder();

}

}

**Файл PriceInterface.java**

package furniturestore;

public interface PriceInterface {

public int countPrice();

}

**Файл FObject.java**

package furniturestore.fobject;

import furniturestore.PriceInterface;

abstract public class FObject implements PriceInterface{

protected String fName;//Название предмета мебели

protected String fModel;

protected int fCost;//Себестоимость предмета мебели

protected int fPrice;//Цена предмета мебели

public FObject()//конструктор класса

{

fName=new String();

fModel=new String();

fCost=0;

fPrice=0;

}

public void setModel(String model)//установка значений

{

fModel=model;

}

protected void setPrice()

{

fPrice=countPrice();

}

public void setPrice(int price)

{

fPrice=price;

}

public void setCost(int cost)

{

fCost=cost;

setPrice();

}

public int getPrice()

{

return fPrice;

}

public int getCost()

{

return fCost;

}

@Override

public int countPrice()//Подсчёт отпускной цены на основе себестоимости

{

int price;

price=(int) ((fCost\*1.2)\*1.2);

return price;

}

abstract protected void generateName();

@Override

public String toString()

{

String str=new String();

str=fName+"\_"+fModel+"\_себестоимость:"+fCost+"у.е.\_Цена:"+fPrice+"у.е.";

return str;

}

}

**Файл Chair.java**

package furniturestore.fobject.fixed;

public class Chair extends FixedFurniture{

private int maxWeight;

private static int cNum=0;

private int cId;

public Chair()

{

super();

maxWeight=0;

generateName();

cNum=cNum+1;

cId=cNum;

}

public void setMaxWeight(int weight)

{

maxWeight=weight;

}

@Override

protected void generateName()

{

fName="Стул";

}

@Override

public String toString()

{

String str=new String();

str=super.toString()+"\_грузоподъёмность:"+maxWeight+"кг";

return str;

}

@Override

public boolean equals(Object obj)

{

if(obj==null)

return false;

if(this==obj)

return true;

if(obj instanceof Chair )

{

Chair temp=(Chair)obj;

return this.cId==temp.cId && this.fCost==temp.fCost &&

this.fMaterial.equals(temp.fMaterial) &&

this.fModel.equals(temp.fModel) &&

this.fName.equals(temp.fName) &&

this.fPrice==temp.fPrice &&

this.maxWeight==temp.maxWeight;

}

else

return false;

}

@Override

public int hashCode() {

int hash = 7;

hash = 47 \* hash + this.maxWeight;

hash = 47 \* hash + this.cId;

return hash;

}

}

**Файл FixedFurniture.java**

package furniturestore.fobject.fixed;

import furniturestore.fobject.FObject;

public class FixedFurniture extends FObject {

protected String fMaterial;

public FixedFurniture()

{

super();

fMaterial=new String();

generateName();

}

public void setMaterial(String material)

{

fMaterial=material;

}

@Override

protected void generateName() {

fName="Unknown\_Fixed\_Furniture";

}

@Override

public String toString()

{

String str=new String();

str=super.toString()+"\_Материал:"+fMaterial;

return str;

}

}

Файл Table.java

package furniturestore.fobject.fixed;

public class Table extends FixedFurniture{

private String fForma;

private static int tNum=0;

private int tId;

public Table()

{

super();

fForma=new String();

generateName();

tNum=tNum+1;

tId=tNum;

}

public void setForma(String forma)

{

fForma=forma;

}

@Override

protected void generateName()

{

fName="Стол";

}

@Override

public String toString()

{

String str=new String();

str=super.toString()+"\_форма\_столешницы:"+fForma;

return str;

}

@Override

public boolean equals(Object obj)

{

if(obj==null)

return false;

if(this==obj)

return true;

if(obj instanceof Table)

{

Table temp=(Table)obj;

return this.fCost==temp.fCost &&

this.fForma.equals(temp.fForma) &&

this.fMaterial.equals(temp.fMaterial) &&

this.fModel.equals(temp.fModel) &&

this.fName.equals(temp.fName) &&

this.fPrice==temp.fPrice &&

this.tId==temp.tId;

}

else

return false;

}

@Override

public int hashCode() {

int hash = 5;

hash = 79 \* hash + (this.fForma != null ? this.fForma.hashCode() : 0);

hash = 79 \* hash + this.tId;

return hash;

}

}

**Файл Sofa.java**

package furniturestore.fobject.soft;

public class Sofa extends SoftFurniture{

private boolean fArmset;

private static int sNum=0;

private int sId;

public Sofa()

{

super();

fArmset=false;

generateName();

sNum=sNum+1;

sId=sNum;

}

public void setArmset()

{

fArmset=true;

}

@Override

protected void generateName()

{

fName="Диван";

}

@Override

public String toString()

{

String str=new String();

String str1="есть", str2="нет";

if(fArmset==true)

str=super.toString()+"\_Подлокотники:"+str1;

else

str=super.toString()+"\_Подлокотники:"+str2;

return str;

}

@Override

public boolean equals(Object obj)

{

if(obj==null)

return false;

if(this==obj)

return true;

if(obj instanceof Sofa)

{

Sofa temp=(Sofa)obj;

return this.fArmset==temp.fArmset &&

this.fCost==temp.fCost &&

this.fModel.equals(temp.fModel) &&

this.fName.equals(temp.fName) &&

this.fPacking.equals(temp.fPacking) &&

this.fPrice==temp.fPrice &&

this.fSheathing.equals(temp.fSheathing) &&

this.sId==temp.sId;

}

else

return false;

}

@Override

public int hashCode() {

int hash = 3;

hash = 83 \* hash + (this.fArmset ? 1 : 0);

hash = 83 \* hash + this.sId;

return hash;

}

}

**Файл SoftChair.java**

package furniturestore.fobject.soft;

public class SoftChair extends SoftFurniture{

private boolean fFolding;

private static int scNum=0;

private int scId;

public SoftChair()

{

super();

fFolding=false;

generateName();

scNum=1+scNum;

scId=scNum;

}

public void setFolding()

{

fFolding=true;

}

@Override

protected void generateName()

{

fName="Мягкое\_кресло";

}

@Override

public String toString()

{

String str=new String();

String str1="да", str2="нет";

if(fFolding==true)

str=super.toString()+"\_Раскладной:"+str1;

else

str=super.toString()+"\_Раскладной:"+str2;

return str;

}

@Override

public boolean equals(Object obj)

{

if(obj==null)

return false;

if(this==obj)

return true;

if(obj instanceof SoftChair)

{

SoftChair temp=(SoftChair)obj;

return this.fFolding==temp.fFolding &&

this.fCost==temp.fCost &&

this.fModel.equals(temp.fModel) &&

this.fName.equals(temp.fName) &&

this.fPacking.equals(temp.fPacking) &&

this.fPrice==temp.fPrice &&

this.fSheathing.equals(temp.fSheathing) &&

this.scId==this.scId;

}

else return false;

}

@Override

public int hashCode() {

int hash = 3;

hash = 31 \* hash + (this.fFolding ? 1 : 0);

hash = 31 \* hash + this.scId;

return hash;

}

}

**Файл SoftFurniture.java**

package furniturestore.fobject.soft;

import furniturestore.fobject.FObject;

public class SoftFurniture extends FObject{

protected String fPacking;//нибивка

protected String fSheathing;//обшивка

public SoftFurniture()

{

super();

fPacking=new String();

fSheathing=new String();

generateName();

}

public void setPacking(String packing)

{

fPacking=packing;

}

public void setSheathing(String sheathing)

{

fSheathing=sheathing;

}

@Override

protected void generateName() {

fName="Unknown\_Soft\_Furniture";

}

@Override

public String toString()

{

String str;

str=super.toString()+"\_Обивка:"+fSheathing+"\_Набивка:"+fPacking;

return str;

}

}

**Файл Order.java**

package furniturestore.order;

import furniturestore.PriceInterface;

import furniturestore.fobject.FObject;

import java.util.\*;

public class Order implements PriceInterface{

private List<FObject> furnitureColl;

private int cost;

private int price;

private static int orderNum=0;

public Order()

{

furnitureColl = new ArrayList<FObject> ();

orderNum=orderNum+1;

}

public void addFurniture(FObject obj)

{

furnitureColl.add(obj);

}

public void printOrder()

{

int i=1;

Iterator it=furnitureColl.iterator();

System.out.println("=================================================");

while(it.hasNext())

{

System.out.println(i+")"+(it.next()).toString());

i=i+1;

}

System.out.println();

System.out.println("Себестоимость заказа:"+cost+" Цена заказа:"+price);

System.out.println("=================================================");

}

@Override

protected void finalize()

{

try {

super.finalize();

} catch (Throwable ex) {

System.err.println("Ошибка при удалении объекта");

}

orderNum=orderNum-1;

}

@Override

public int countPrice() {

int tempPrice=0, tempCost=0;

Iterator it=furnitureColl.iterator();

FObject obj;

while(it.hasNext())

{

obj=(FObject)it.next();

tempCost=tempCost+obj.getCost();

tempPrice=tempPrice+obj.getPrice();

}

cost=tempCost;

price=tempPrice;

return tempPrice;

}

}