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**实验一：校内报纸**

// School.java

public class School {

String schoolName;

InnerNewspaper newsPaper;

School() {

this("某某大学");

}

School(String s){

newsPaper = new InnerNewspaper();

String[] content = {"学校举办迎新会。", "机械系获得机器人大赛冠军。", "计算机学院召开学生会换届大会。"};

schoolName = s;

newsPaper.setContent(content);

}

public void showNews(){

newsPaper.showContent();

}

class InnerNewspaper {

String[] content;

String paperName = "校园闻周报";

void setContent(String[] s){

content = s;

}

public void showContent(){

System.out.println(schoolName);

for (int i = 0; i < content.length; i++){

System.out.println(content[i]);

}

}

}

}

// MainClass.java

public class MainClass {

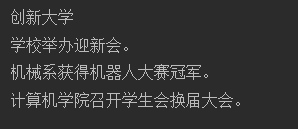
public static void main(String args[]){

School school = new School("创新大学");

school.showNews();

}

}



实验后的练习

// MobileShop.java

class MobileShop {

InnerPurchaseMoney purchaseMoney1;

InnerPurchaseMoney purchaseMoney2;

private int mobileAmount;

MobileShop(){

purchaseMoney1=new InnerPurchaseMoney(20000);

purchaseMoney2=new InnerPurchaseMoney(20000);

}

void setMobileAmount(int m) {

mobileAmount = m;

}

int getMobileAmount() {

return mobileAmount;

}

class InnerPurchaseMoney {

int moneyValue;

InnerPurchaseMoney(int m) {

moneyValue = m;

}

void buyMobile() {

if(moneyValue>=20000) {

mobileAmount = mobileAmount-6;

System.out.println("用价值"+moneyValue+"的内部购物卷买了6部手机");

}else if(moneyValue<20000&&moneyValue>=10000) {

mobileAmount = mobileAmount-3;

System.out.println("用价值"+moneyValue+"的内部购物卷买了3部手机");

}

}

}

}

// NewYear.java

public class NewYear {

public static void main(String args[]) {

MobileShop shop = new MobileShop();

shop.setMobileAmount(30);

System.out.println("手机专卖店目前有"+shop.getMobileAmount()+"部手机");

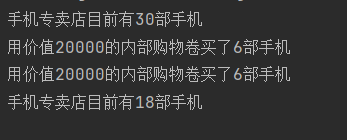
shop.purchaseMoney1.buyMobile();

shop.purchaseMoney2.buyMobile();

System.out.println("手机专卖店目前有"+shop.getMobileAmount()+"部手机");

}

}



**实验二：检查危险品**

//Goods.java

public class Goods {

boolean isDanger;

String name;

public void setIsDanger(boolean boo){

isDanger = boo;

}

public boolean isDanger(){

return isDanger;

}

public void setName(String s){

name = s;

}

public String getName(){

return name;

}

}

//DangerException.java

public class DangerException extends Exception{

String message;

public DangerException(){

message = "危险品！";

}

public void toShow(){

System.out.print(message + " ");

}

}

//Machine.java

public class Machine {

public void checkBag(Goods goods) throws DangerException{

if (goods.isDanger()){

DangerException danger = new DangerException();

throw danger;

}

}

}

//Check.java

public class Check {

public static void main(String args[]){

Machine machine = new Machine();

String name[]= {"苹果", "炸药", "西服", "硫酸", "手表", "硫磺"};

Goods[] goods = new Goods[name.length];

for (int i = 0; i < name.length; i++){

goods[i] = new Goods();

if (i%2 == 0){

goods[i].setIsDanger(false);

goods[i].setName(name[i]);

}

else {

goods[i].setIsDanger(true);

goods[i].setName(name[i]);

}

}

for (int i = 0; i< goods.length; i++){

try{ machine.checkBag(goods[i]);

System.out.println(goods[i].getName() + "检查通过");

}

catch(DangerException e){

e.toShow();

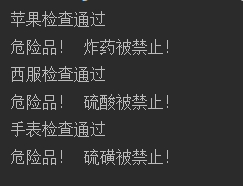
System.out.println(goods[i].getName() + "被禁止！");

}

}

}

}



**实验三： Lambda语法糖**

// MainClass.java

interface Area{

double computerArea(double r);

}

class Circle{

double r;

void setRadius(double r){

this.r = r;

}

void showArea(Area area){

double result = area.computerArea(r);

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

}

}

public class MainClass{

public static void main(String args[]){

Area area = new Area(){

public double computerArea(double r){

return Math.PI\*r\*r;

}

};

System.out.println(area.computerArea(5));

area = (double r)->{ return Math.PI \* r \* r;};

System.out.println(area.computerArea(2));

Circle circle = new Circle();

circle.setRadius(12.8);

circle.showArea(new Area(){

public double computerArea(double r){

return Math.PI\*r\*r;

}});

circle.setRadius(100);

circle.showArea((double r)->{ return Math.PI \* r \* r;});

}

}

