Bài 1 :

**public** **abstract** **class** Phuongtiendichuyen<HangSanXuat> {

**protected** String loaiphuongtien;

**protected** HangSanXuat hangsanxuat;

**public** String layTenHangSanXuat() {

**return** **null**;

}

**public** **abstract** **void** batdau();

**public** **abstract** **void** tangtoc();

**public** **abstract** **void** dunglai();

**public** **abstract** **double** layVanToc();

}

**public** **class** Maybay **extends** Phuongtiendichuyen {

String loaiNhienLieu;

**public** **void** catcanh() {

System.***out***.println(" Chuyen bay cats canhs luc 11h");

}

**public** **void** hacanh() {

System.***out***.println(" Chuyen bay ha canh luc 5h chieu");

}

@Override

**public** String layTenHangSanXuat() {

System.***out***.println(" nhap hang");

**return** **null**;

}

@Override

**public** **void** batdau() {

System.***out***.println("Bat dau luc 10h");

}

@Override

**public** **void** tangtoc() {

System.***out***.println(" Tang toc len 300 dam");

}

@Override

**public** **void** dunglai() {

System.***out***.println("dung phanh de dung chuyen bay ");

}

@Override

**public** **double** layVanToc() {

**return** 0;

}

}

**public** **class** Xedap **extends** Phuongtiendichuyen {

**public** **double** layVantoc() {

**return** 0;

}

@Override

**public** **void** batdau() {

System.***out***.println("Bat dau luc 5h sang");

}

@Override

**public** **void** tangtoc() {

System.***out***.println(" Tang toc len 20 dam");

}

@Override

**public** **void** dunglai() {

System.***out***.println("dung phanh de dung chuyen bay ");

}

@Override

**public** **double** layVanToc() {

System.***out***.println(0);

**return** 0;

}

}

**public** **class** XeOto **extends** Phuongtiendichuyen {

String loainhienlieu;

**public** **double** layVantoc() {

**return** 0;

}

@Override

**public** **void** batdau() {

System.***out***.println("Bat dau luc 8h");

}

@Override

**public** **void** tangtoc() {

System.***out***.println(" Tang toc len 60 dam");

}

@Override

**public** **void** dunglai() {

System.***out***.println("dung phanh de dung chuyen bay ");

}

@Override

**public** **double** layVanToc() {

System.***out***.println(0);

**return** 0;

}

}

**public** **class** Hangsanxuat {

String tenHangSanXuat;

String tenQuocGia;

**public** Hangsanxuat(String tenHangSanXuat, String tenQuocGia) {

**this**.tenHangSanXuat=tenHangSanXuat;

**this**.tenQuocGia=tenQuocGia;

}

**public** String gettenHangSanXuat() {

**return** tenHangSanXuat;

}

**public** String gettenQuocGia() {

**return** tenQuocGia;

}

**public** **void** settenHangSanXuat() {

**this**.tenHangSanXuat=tenHangSanXuat;

}

**public** **void** settenQuocGia() {

**this**.tenQuocGia=tenQuocGia;

}

}

**public** **class** Main {

**public** **static** **void** main(String[] args) {

Maybay mb= **new** Maybay();

XeOto xot= **new** XeOto();

Xedap xd= **new** Xedap();

mb.layVanToc();

xot.layVantoc();

xd.layVantoc();

}

}

Bài 2:

|  |  |  |
| --- | --- | --- |
|  | | |
| interface Moverable{ | | |
|  | | | public void moveUp(); | | |
|  | | | public void moveDown(); | | |
|  | | | public void moveLeft(); | | |
|  | | | public void moveRight(); | | |
|  | | | } | | |
|  | | | class MovereablePoint implements Moverable{ | | |
|  | | | int x,y; | | |
|  | | | int xSpeed; | | |
|  | | | int ySpeed; | | |
|  | | | public MovereablePoint(int x, int y, int xSpeed, int ySpeed) { | | |
|  | | | super(); | | |
|  | | | this.x = x; | | |
|  | | | this.y = y; | | |
|  | | | this.xSpeed = xSpeed; | | |
|  | | | this.ySpeed = ySpeed; | | |
|  | | | } | | |
|  | | | public MovereablePoint() {} | | |
|  | | | @Override | | |
|  | | | public void moveUp() { | | |
|  | | | System.out.println("move up"); | | |
|  | | | } | | |
|  | | | @Override | | |
|  | | | public void moveDown() { | | |
|  | | | System.out.println("move Down"); | | |
|  | | | } | | |
|  | | | @Override | | |
|  | | | public void moveLeft() { | | |
|  | | | System.out.println("move left"); | | |
|  | | | } | | |
|  | | | @Override | | |
|  | | | public void moveRight() { | | |
|  | | | System.out.println("move Right"); | | |
|  | | | } | | |
|  | | |  | | |
|  | | | @Override | | |
|  | | | public String toString() { | | |
|  | | | return "MovereablePoint=" +x+"y="+xSpeed+ySpeed; | | |
|  | | | } | | |
|  | | |  | | |
|  | | | } | | |
|  | | |  | | |
| class MoverableCircle implements Moverable{  public int radius; | | | |
|  | | public MovereablePoint center; | | | |
|  | | @Override | | | |
|  | | public void moveUp() { | | | |
|  | | System.out.println("move up"); | | | |
|  | | } | | | |
|  | | @Override | | | |
|  | | public void moveDown() { | | | |
|  | | System.out.println("move Down"); | | | |
|  | | } | | | |
|  | | @Override | | | |
|  | | public void moveLeft() { | | | |
|  | | System.out.println("move left"); | | | |
|  | | } | | | |
|  | | @Override | | | |
|  | | public void moveRight() { | | | |
|  | | System.out.println("move Right"); | | | |
|  | | } | | | |
|  | | public MoverableCircle(int radius, MovereablePoint center) { | | | |
|  | | super(); | | | |
|  | | this.radius = radius; | | | |
|  | | this.center = center; | | | |
|  | | } | | | |
|  | | public MoverableCircle() {} | | | |
|  | | public String toString() { | | | |
|  | | return "MoverableCircle [radius=" + radius + ", center=" + center + "]"; | | | |
|  | | } | | | |
|  | |  | | | |
|  | |  | | | |
|  | |  | | | |
|  | | }  Public class bai 2 | | | |
|  | public static void main(String[] args) { | | | |
|  | MoverableCircle mc1=new MoverableCircle(); | | | |
|  | MovereablePoint mp1=new MovereablePoint(); | | | |
|  | mc1.moveDown(); mc1.moveLeft();mc1.moveRight();mc1.moveUp(); | | | |
|  | mp1.moveDown(); mp1.moveLeft();mp1.moveRight();mp1.moveUp(); | | | |
|  | } | | | |
|  |  | | | |
|  | } | | | |