**package** test;

**public** **abstract** **class** Garden{

**public** **static** **final** **int** ***FLOWER\_BED*** = 1;

**public** **static** **final** **int** ***CORNER*** = 2;

**public** **static** **final** **int** ***GARDEN\_CENTER*** = 3;

//定义类型接口

**public** **abstract** Elegant createE();

**public** **abstract** Practical createP();

**public** **abstract** Lazy createL();

**public** **static** Garden getPosition(**int** positionType){

**switch**(positionType){

**case** ***FLOWER\_BED***:

**return** **new** FlowerType();

**case** ***CORNER***:

**return** **new** CornerType();

**case** ***GARDEN\_CENTER***:

**return** **new** GardenType();

**default**:

**return** **null**;

}

}

}

//管理不同的Position

**public** **class** FlowerType **extends** Garden{

**public** Elegant createE(){

**return** **new** Tulips();

}

**public** Practical createP(){

**return** **new** Grapes();

}

**public** Lazy createL(){

**return** **new** Rose();

}

}

**public** **class** CornerType **extends** Garden{

**public** Elegant createE(){

**return** **new** Banyan();

}

**public** Practical createP(){

**return** **new** Pomegranate();

}

**public** Lazy createL(){

**return** **new** Camellia();

}

}

**public** **class** GardenType **extends** Garden{

**public** Elegant createE(){

**return** **new** Bluegress();

}

**public** Practical createP(){

**return** **new** Loofah();

}

**public** Lazy createL(){

**return** **new** Bamboo();

}

}

//Elegant 系列

**public** **class** Elegant{

**public** String getType(){

**return** "Elegant";

}

}

**public** **class** Tulips **extends** Elegant{

**public** String getType(){

**return** "tulips";

}

}

**public** **class** Banyan **extends** Elegant{

**public** String getType(){

**return** "banyan";

}

}

**public** **class** Bluegress **extends** Elegant{

**public** String getType(){

**return** "bluegress";

}

}

//practical 系列

**public** **class** Practical{

**public** String getType(){

**return** "Practical";

}

}

**public** **class** Grapes **extends** Practical{

**public** String getType(){

**return** "grapes";

}

}

**public** **class** Pomegranate **extends** Practical{

**public** String getType(){

**return** "pomegranate";

}

}

**public** **class** Loofah **extends** Practical{

**public** String getType(){

**return** "loofah";

}

}

//Lazy 系列

**public** **class** Lazy{

**public** String getType(){

**return** "Lazy";

}

}

**public** **class** Rose **extends** Lazy{

**public** String getType(){

**return** "rose";

}

}

**public** **class** Camellia **extends** Lazy{

**public** String getType(){

**return** "camellia";

}

}

**public** **class** Bamboo **extends** Lazy{

**public** String getType(){

**return** "bamboo";

}

}

//Client 调用

**public** **class** Client{

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

//Flower\_bed 对象

Garden Flower\_bed = Garden.*getPosition*(Garden.***FLOWER\_BED***);

//生产Elegant类的tulips

Elegant tulips = Flower\_bed.createE();

System.***out***.println("生产了：" + tulips.getType());

//生产Lazy类的rose

Lazy rose = Flower\_bed.createL();

System.***out***.println("生产了" + rose.getType());

//Garden\_center 对象

Garden Garden\_center = Garden.*getPosition*(Garden.***GARDEN\_CENTER***);

//生产practical类的grapes

Practical grapes = Garden\_center.createP();

System.***out***.println("生产了" + grapes.getType());

}

}