Java Programs:

1)Object:

**package** Oops;

**class** Animal {

**public** **void** anm()

{

System.***out***.println("This is a animal class");

}

**public** **class** Cat **extends** Animal {

String catnm="Rani";

String catbreed="meow";

**public** **void** color()

{

System.***out***.println("She is black & white in color");

}

**public** **class** Dog **extends** Animal

{

String dognm="Rani";

String dogbreed="Barking";

**static** **void** color()

{

System.***out***.println("HE is Brown in color");

}

**static** **class** cow **extends** Animal

{

String cownm="abc";

**static** **void** color()

{

System.***out***.println("She is black in color");

}

}

}

2)Plymorphism:

**package** Polymorphism;

**class** Em

{

**public** **void** enm()

{

System.***out***.println("the Employee details are as follows:");

}

}

**class** Emp1 **extends** Em

{

**public** **void** enm()

{

System.***out***.println("The employee name is:Roshni");

}

}

**class** Emp2 **extends** Em

{

**public** **void** enm()

{

System.***out***.println("The employee name is:Radhika");

}

}

**class** Emp3 **extends** Em

{

**public** **void** enm()

{

System.***out***.println("The employee name is:Dipesh");

}

}

**class** Employee

{

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

{

Em eobj=**new** Em();

Em e1obj=**new** Emp1();

Em e2obj=**new** Emp2();

Em e3obj=**new** Emp3();

eobj.enm();

e1obj.enm();

e2obj.enm();

e3obj.enm();

}

}

3)Superkeyword:

**package** Superkeyword;

**class** Student

{

**public** **void** Studentdetails()

{

System.***out***.println("The Student details are as follows:");

}

}

**class** Stu1 **extends** Student

{

**public** **void** Studentdetails()

{

System.***out***.println("These are the student details:Name,Age");

**super**.Studentdetails();

}

}

**class** Test

{

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

{

Stu1 sobj=**new** Stu1();

sobj.Studentdetails();

}

}

4)Multiple Interface:

**package** Interface;

**interface** Teacher

{

**public** **void** view();

}

**interface** Student

{

**public** **void** list();

}

**class** Demo **implements** Teacher,Student

{

**public** **void** view()

{

System.***out***.println("The teacher records areas follows:");

}

**public** **void** list()

{

System.***out***.println("The list of students are:");

}

}

**public** **class** MultipleInterface

{

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

{

Demo dobj=**new** Demo();

dobj.view();

dobj.list();

}

}

5)Using Exception:

**package** Exception;

**class** Car **extends** Exception

{

String str1;

Car(String str2)

{

str1=str2;

}

**public** String toString()

{

**return**("This is a car:"+str1);

}

}

**class** UDE{

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

{

**try**{

System.***out***.println("This is a very beatiful car in india.");

**throw** **new** Car("JAGUAR");

}

**catch**(Car exp)

{

System.***out***.println("catch block");

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

}

}

}

6)Collection:

**package** Collection;

**import** java.util.\*;

**public** **class** StackDemo {

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

{

Stack<String> stack=**new** Stack<String>();

stack.push("Ronak");

stack.push("Jorge");

stack.push("Advard");

stack.push("Bella");

stack.pop();

Iterator<String> itr=stack.iterator();

**while**(itr.hasNext())

{

System.***out***.println(itr.next());

}

}

}

7)Abstraction:  
**package** Abstraction;

**abstract** **class** Add

{

**public** **abstract** **void** add();

{

System.***out***.println("Tha addition is");

}

**class** Add1 **extends** Add

{

**public** **void** add()

{

System.***out***.println("The addition is:");

}

}

}

**public** **class** Addition

{

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

{

Add aobj=**new** Add();

aobj.add();

}

}

Activities:

1)Nested:

**package** Activity;

**public** **class** NestedFor {

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

{

**for**(**int** i=1;i<=3;i++)

{

System.***out***.println("Outer Loop:"+i);

}

**for**(**int** j=1;j<=4;j++)

{

System.***out***.println("Inner Loop:"+j);

}

}

}

2)Multidimensional for loop:

**package** Activity;

**public** **class** MultDimenFor {

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

{

**int** [][] a= {{1,2,3,4,5},{6,7,8,9,0}};

**for**(**int** i=0;i<5;i++)

**for**(**int** j=0;j<5;j++)

{

System.***out***.println("a["+ i +"]["+ j + " ]="+a[i][j]);

}

}

}

3)Month:

**package** Activity;

**public** **class** Month {

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

{

String month[]= {"January","February","March","April","May","June","July","August","September","October","November","December"};

String days[]= {"Monday","Tuesday","Wednesday","Thursday","Friday","Saturday","Sunday"};

**for**(String a:month) {

System.out.println(a);

}

**for**(String w:week) {

(**for**(String w=1;w<=4;w++)

{

System.out.println(w);

}

}

}

}

4)break:

**package** Activity;

**public** **class** Break {

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

{

**for**( **int** i=0;i<20;i++)

{

**if**(i==15)

{

**break**;

}

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

}

}

}