class Student{

int id;

void display(){

System.out.println(" Result : "+id);

}

}

class Demo1{

public static void main(String aa[]){

//Student.id=900;

Student s1 = new Student();

s1.id=100;

s1.display();

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

Student s2 = new Student();

s2.id=200;

s2.display();

}

}

class A{

int x;

void add(){

System.out.println(" X : "+x);

}

}

class B extends A{

int y;

void sum(){

System.out.println(" Y : "+y);

}

}

class Demo6{

public static void main(String aa[]){

B s1=new B();

s1.x=100;

s1.y=200;

s1.add();

s1.sum();

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

A s2=new B();

s2.x=300;

s2.add();

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

Object s3=new B();

}

}

class A{

int x;

void add(){

System.out.println(" X : "+x);

}

}

class B extends A{

int y;

void sum(){

System.out.println(" Y : "+y);

}

}

class Demo7{

public static void main(String aa[]){

B s1=new B();

s1.x=100;

s1.y=200;

s1.add();

s1.sum();

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

A s2=s1;

s2.add();

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

Object s3=s2;

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

A s4=(A)s3;

s4.add();

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

B s5=(B)s4;

s5.add();

s5.sum();

}

}

interface Mail

{

void register();

void valid();

}

class Demo6

{

public static void main(String aa[])

{

Mail ob1=new Mail()

{

public void register()

{

System.out.println(" Unknown registration");

}

public void valid()

{

System.out.println(" Unknown validation");

}

};

ob1.register();

ob1.valid();

}

}

interface Mail1

{

void register();

}

class Sample

{

void test()

{

new Mail1()

{

public void register()

{

System.out.println(" Anonymous registration ");

}

}.register();

}

}

interface Mail2

{

void register();

}

class Yahoo implements Mail1,Mail2

{

public void register()

{

System.out.println(" Yahoo registration ");

}

}

class Demo5

{

public static void main(String aa[])

{

Mail1 ob1=new Yahoo();

Mail2 ob2=new Yahoo();

ob1.register();

ob2.register();

new Sample().test();

}

}

package demo1;

public class Test1 {

public int v1\_public; //variable declaration

private int v2\_private;

protected int v3\_protected;

int v4\_default;

public void display(){

System.out.println(" Public : "+v1\_public);

System.out.println(" Private : "+v2\_private);

System.out.println(" Protected : "+v3\_protected);

System.out.println(" Default : "+v4\_default);

}

public static void main(String args[]){

Test1 ob1=new Test1();

ob1.v1\_public=100;

ob1.v2\_private=200;

ob1.v3\_protected=300;

ob1.v4\_default=400;

ob1.display();

}

}

class A

{

void add()

{

System.out.println(" Class A ---> Hai ");

}

}

class B extends A

{

}

class C extends A

{

void add()

{

System.out.println(" Class C ---> Welcome ");

}

}

class Demo4

{

public static void main(String aa[])

{

new A().add();

new B().add();

new A(){}.add();

new C().add();

new A()

{

void add()

{

System.out.println(" Anonymous Class ---> Good noon! ");

}

}.add();

A s1 = new A()

{

void add()

{

System.out.println(" Anonymous Class ---> Good evening! ");

}

};

s1.add();

}

}

class A

{

A()

{

System.out.println(" Welcome ");

}

}

class Demo1

{

public static void main(String aa[])

{

new A();

new A();

new A();

}

}

class B

{

int x;

B()

{

System.out.println(" X : "+x);

}

B(int y)

{

this.x=y;

System.out.println(" X : "+x);

}

}

class Demo2

{

public static void main(String aa[])

{

new B();

new B(50);

}

}

class C

{

C()

{

System.out.println(" Hai ");

}

C(int x)

{

System.out.println(" X : "+x);

}

}

class D extends C

{

D()

{

super(30);

System.out.println(" Welcome ");

}

}

class Demo3

{

public static void main(String aa[])

{

new D();

}

}

class E

{

int x;

E()

{

System.out.println(" Hai ");

}

E(int y)

{

this.x=y;

System.out.println(" X : "+x);

}

E(int x,int y)

{

System.out.println(" "+x+" "+y);

}

}

class F extends E

{

F()

{

super(10,10);

System.out.println(" Class F ");

}

}

class Demo4

{

public static void main(String aa[])

{

new F();

}

}