1. //Example of an abstract class that has abstract and non-abstract methods
2. **abstract** **class** Bike{
3. Bike(){System.out.println("bike is created");}
4. **abstract** **void** run();
5. **void** changeGear(){System.out.println("gear changed");}
6. }
7. //Creating a Child class which inherits Abstract class
8. **class** Honda **extends** Bike{
9. **void** run(){System.out.println("running safely..");}
10. }
11. //Creating a Test class which calls abstract and non-abstract methods
12. **class** TestAbstraction2{
13. **public** **static** **void** main(String args[]){
14. Bike obj = **new** Honda();
15. obj.run();
16. obj.changeGear();
17. }
18. }
19. **abstract** **class** Bank{
20. **abstract** **int** getRateOfInterest();
21. }
22. **class** SBI **extends** Bank{
23. **int** getRateOfInterest(){**return** 7;}
24. }
25. **class** PNB **extends** Bank{
26. **int** getRateOfInterest(){**return** 8;}
27. }
28. **class** TestBank{
29. **public** **static** **void** main(String args[]){
30. Bank b;
31. b=**new** SBI();
32. System.out.println("Rate of Interest is: "+b.getRateOfInterest()+" %");
33. b=**new** PNB();
34. System.out.println("Rate of Interest is: "+b.getRateOfInterest()+" %");
35. }}

**abstract** **class** Shape{

**abstract** **void** draw();

}

**class** Rectangle **extends** Shape{

**void** draw(){System.out.println("drawing rectangle");}

}

**class** Circle **extends** Shape{

**void** draw(){System.out.println("drawing circle");}

}

**Animals sound example**

package a;

public class A {

public static void main(String[] args)

{

cat c=new cat();

c.sound();

dog d=new dog();

d.sound();

}

}

abstract class animals

{

abstract void sound();

}

class cat extends animals

{

@Override

void sound() {

System.out.println("cat is mawoooooing");

}

}

class dog extends animals

{

@Override

void sound() {

System.out.println("dog is howwwwwwwing");

}

}

البسيري = 1

العمقي = 2

الكريمي = 3