5. Show the output of the following applications.

|  |  |
| --- | --- |
| public class **OOPExercises** {      public static void main(String[] args) {          FirstClass objA = new FirstClass();          SecondClass objB = new SecondClass();          System.out.println("in main(): ");          System.out.println("objA.a = "+objA.getFirstClass());          System.out.println("objB.b = "+objB.getSecondClass());          objA.setFirstClass (222);          objB.setSecondClass (333.33);          System.out.println("objA.a = "+objA.getFirstClass());          System.out.println("objB.b = "+objB.getSecondClass());      }  } | **Output:**   in the constructor of class FirstClass:  a = 100  a = 333  -----in the constructor of class B:  b = 123.45  b = 3.14159  in main():  objA.a = 333  objB.b = 3.14159  objA.a = 222  objB.b = 333.33 |
| public class FirstClass {      int a = 100;      public FirstClass () {          System.out.println("in the constructor of class **FirstClass**: ");          System.out.println("a = "+a);          a = 333;          System.out.println("a = "+a);      }      public void setFirstClass( int value) {          a = value;      }      public int getFirstClass() {          return a;      }  } //class FirstClass | |
| public class **SecondClass** {      double b = 123.45;      public SecondClass() {          System.out.println("-----in the constructor of class B: ");          System.out.println("b = "+b);          b = 3.14159;          System.out.println("b = "+b);      }      public void setSecondClass( double value) {          b = value;      }      public double getSecondClass() {          return b;      }  } //class SecondClass | |

6.

|  |  |
| --- | --- |
| public class **OOPExercises** {      static int a = 555;        public static void main(String[] args) {          A objA = new A();          B objB1 = new B();          A objB2 = new B();          C objC1 = new C();          B objC2 = new C();          A objC3 = new C();          objA.display();          objB1.display();          objB2.display();          objC1.display();          objC2.display();          objC3.display();    }  } | **Output:**   a in A = 100  a in B = 123  a in B = 123  a in C = 543  a in C = 543  a in C = 543 |
| public class **A** {      int a = 100;      public void display() {          System.out.printf("a in A = %d\n", a);      }  } //class A | |
| public class **B** extends A {      private int a = 123;      public void display() {          System.out.printf("a in B = %d\n", a);      }  } //class B | |
| public class **C** extends B {      private int a = 543;      public void display() {          System.out.printf("a in C = %d\n", a);      }  } //class C | |