

## Banarsidas Chandiwalla Institute of Information Technology

Sr. No	Question	Pg. No
1.	Write a Java program to print all odd numbers between 1 to 10	
2.	Write a Java program to find out factorial of a number through recursion	
3.	Write a Java program to accept command line arguments & print them	
4.	Write a Java program to print fibonacci series	
5.	Write a Java program that creates a class accounts with following details: Instance variables: ac_no., name, ac_name, balance Methods: withdrawal (), deposit (), display ().use constructors to initialize members	
6.	Write a Java program to implement constructor overloading	
7.	Write a Java program to count the no. of objects created in a program	
8.	Write a Java program to implement method overriding & method overloading	
9.	Create a class box having height, width, depth as the instance variables & calculate its volume. Implement constructor overloading in it. Create a subclass named box_new that has weight as an instance variable. Use super in the box_new class to initialize members of the base class	
10.	Write a Java program to implement run time polymorphism	
11.	Write a Java program to implement interface. Create an interface named shape having area () & perimeter () as its methods. Create three classes circle, rectangle & square that implement this interface	
12.	Write a Java program to show multiple inheritance	
13.	Write a Java program to implement vector [use: addElement(),elementat().removeElement(),size().]	
14.	Create a user defined exception named “nomatchexception” that is fired when the string entered by the user is not “india”	
15.	Write a Java program to show even & odd numbers by <i>thread</i>	
16.	Write a Java program to iterate through all elements in a array list	

17	Write a Java program to demonstrate the use of equals(), trim() ,length() , substring(), compareTo() of string class	
18	Write a Java program to demonstrate the use of equals() and == in Java	
19	Write a Java program to check a word contains the character 'g' in a given string.	
20	Write a Java program on anonymous classes	
21	Write a Java program to highlight the structure/syntax of a lambda expression	
22	Write a Java program in Java to create database table using Java	
23	Write a Java program in Java to insert, update, delete & select records	

**Question 1: Write a Java program to print all odd numbers between 1 to 10.**

**Code:**

```
import static java.lang.System.out;

class Program1 {

    public static void main(String[] args) {

        for (int i = 1; i <= 10; i += 2) {

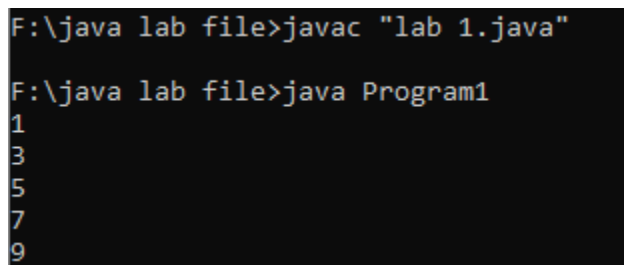
            out.println(i);

        }

    }

}
```

**OUTPUT:**



```
F:\java lab file>javac "lab 1.java"

F:\java lab file>java Program1
1
3
5
7
9
```

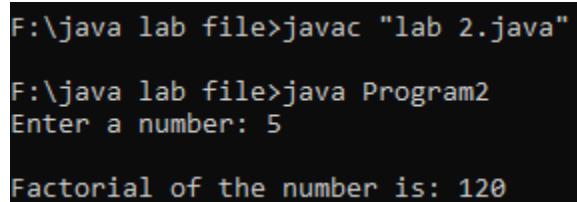
**Question 2. Write a Java program to find out factorial of a number through recursion.**

**Code:**

```
import static java.lang.System.out;
import java.util.Scanner;
class Program2 {
    static int factorial(int i) {
        if (i == 0)
            return 1;
        else
            return i * factorial(i - 1);
    }

    public static void main(String[] args) {
        Scanner input = new Scanner(System.in);
        out.print("Enter a number: ");
        int i = input.nextInt();
        out.println("\nFactorial of the number is: " + factorial(i));
    }
}
```

**OUTPUT:**



```
F:\java lab file>javac "lab 2.java"
F:\java lab file>java Program2
Enter a number: 5
Factorial of the number is: 120
```

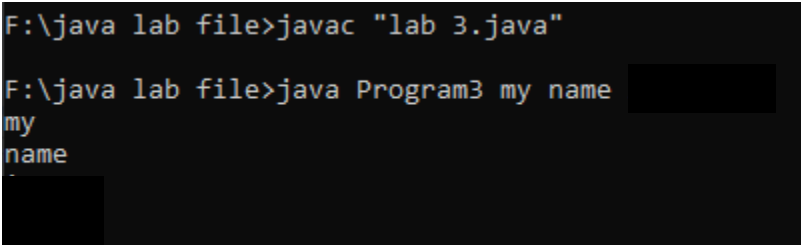
**Question 3. Write a Java program to accept command line arguments & print them.**

**Code**

```
import static java.lang.System.out;

class Program3 {
    public static void main(String[] args) {
        for (String s: args) {
            out.println(s);
        }
    }
}
```

**OUTPUT:**



```
F:\java lab file>javac "lab 3.java"

F:\java lab file>java Program3 my name
my
name
```

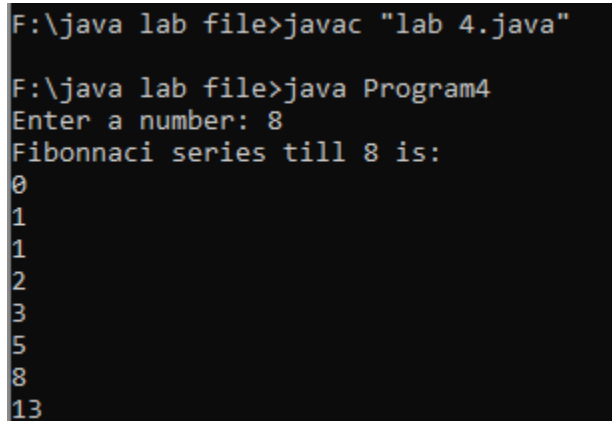
#### **Question 4. Write a Java program to print fibonacci series.**

##### **Code:**

```
import static java.lang.System.out;
import java.util.Scanner;

class Program4 {
    public static void main(String[] args) {
        Scanner input = new Scanner(System.in);
        out.print("Enter a number: ");
        int n = input.nextInt();
        int a = 0, b = 1, c = a + b;
        out.printf("Fibonnaci series till %d is:\n%d\n%d\n%d\n", n, a, b, c);
        for (int i = 0; i < n - 3; i++) {
            a = b;
            b = c;
            c = a + b;
            out.println(c);
        }
    }
}
```

##### **OUTPUT:**



```
F:\java lab file>javac "lab 4.java"
F:\java lab file>java Program4
Enter a number: 8
Fibonnaci series till 8 is:
0
1
1
2
3
5
8
13
```

**Question 5. Write a Java program that creates a class accounts with following details:**

**Code:**

Instance variables: ac\_no., name, ac\_name, balance

Methods: withdrawal(), deposit(), display().use constructors to initialize members.

import static java.lang.System.out;

```
class Accounts {  
    private int ac_no;  
    private String name, ac_name;  
    private double balance;  
  
    public Accounts(int n, String nm, String ac_nm, double bal) {  
        ac_no = n;  
        name = nm;  
        ac_name = ac_nm;  
        balance = bal;  
        out.println("account created!");  
    }  
  
    public void deposit(double amount) {  
        balance += amount;  
        out.println("amount deposited.\ntotal balance is:" + balance);  
    }  
  
    public void withdrawal(double amount) {  
        balance -= amount;  
        out.println("amount withdrawn.\ntotal balance is:" + balance);  
    }  
  
    public void display() {  
        out.printf("amount number: %d\nname: %s\naccount name: %s\ntotal balance: %f\n",
```

```
        ac_no, name, ac_name, balance);  
    }  
}
```

```
class Program5 {  
    public static void main(String[] args) {  
        Accounts ac = new Accounts(501, "John", "54456KLQDH", 10000.0);  
        ac.deposit(2000.0);  
        ac.withdrawal(3000.0);  
        ac.display();  
    }  
}
```

### **OUTPUT:**

```
F:\java lab file>javac "lab 5.java"  
  
F:\java lab file>java Program5  
account created!  
amount deposited.  
total balance is:12000.0  
amount withdrawn.  
total balance is:9000.0  
amount number: 501  
name: John  
account name: 54456KLQDH  
total balance: 9000.000000
```



**Question 6. Write a Java program to implement constructor overloading.**

**Code:**

```
import static java.lang.System.out;

class Box {
    double width, height, depth;
    Box() {
        width = height = depth = -1;
    }

    Box(double len) {
        width = height = depth = len;
    }

    Box(double w, double h, double d) {
        width = w;
        height = h;
        depth = d;
    }

    double volume() {
        return width * height * depth;
    }
}

class Program6 {
    public static void main(String[] args) {
        Box mybox1 = new Box(10, 20, 15),
            mybox2 = new Box(),
            mybox3 = new Box(7);
        double vol;
```

```
        vol = mybox1.volume();  
        out.println("Volume of mybox1 is: " + vol);  
        vol = mybox2.volume();  
        out.println("Volume of mybox2 is: " + vol);  
        vol = mybox3.volume();  
        out.println("Volume of mybox2 is: " + vol);  
    }  
}
```

### **OUTPUT:**

```
F:\java lab file>javac "lab 6.java"  
  
F:\java lab file>java Program6  
Volume of mybox1 is: 3000.0  
Volume of mybox2 is: -1.0  
Volume of mybox2 is: 343.0
```

**Question 7. Write a Java program to count the no. of objects created in a program.**

**Code:**

```
import static java.lang.System.out;

class Program7 {
    static int objectCount = 0;

    Program7() {
        objectCount++;
    }

    public static void main(String[] args) {
        Program7 p1 = new Program7(),
            p2 = new Program7(),
            p3 = new Program7(),
            p4 = new Program7(),
            p5 = new Program7();

        out.println("Object Created in program is: " + Program7.objectCount);
    }
}
```

**OUTPUT:**

```
F:\java lab file>javac "lab 7.java"
F:\java lab file>java Program7
Object Created in program is: 5
```

**Question 8. Write a Java program to implement method over ridding & method overloading.**

**Code:**

```
import static java.lang.System.out;
import static java.lang.Math.PI;

interface Area {
    void findArea(int i);
}

class SquareArea implements Area {
    @Override
    public void findArea(int side) {
        out.println("Area of square is: " + (side * side));
    }
}

class CircleArea implements Area {
    @Override
    public void findArea(int radius) {
        out.println("Area of circle is: " + (PI * radius * radius));
    }
}

class Program9 {
    static void cube(int value) {
        out.println("Cube of int is: " + (value * value * value));
    }

    static void cube(double value) {
        out.println("Cube of double is: " + (value * value * value));
    }
}
```

```
public static void main(String[] args) {  
    SquareArea sq = new SquareArea();  
    sq.findArea(5);  
    CircleArea cir = new CircleArea();  
    cir.findArea(4);  
  
    out.println();  
  
    cube(5);  
    cube(2.5);  
}  
}
```

### **OUTPUT:**

```
F:\java lab file>javac "lab 9.java"  
  
F:\java lab file>java Program9  
Area of square is: 25  
Area of circle is: 50.26548245743669  
  
Cube of int is: 125  
Cube of double is: 15.625
```

**Question 9. Create a class box having height, width, depth as the instance variables & calculate its volume. Implement constructor overloading in it. Create a subclass named box\_new that has weight as an instance variable. Use super in the box\_new class to initialize members of the base class.**

**Code:**

```
import static java.lang.System.out;

class Box {
    double width, height, depth;

    Box() {
        width = height = depth = -1.0;
    }

    Box(double len) {
        width = height = depth = len;
    }

    Box(double w, double h, double d) {
        width = w;
        height = h;
        depth = d;
    }

    double volume() {
        return width * height * depth;
    }
}

class BoxNew extends Box {
    double weight;

    BoxNew() {
        super();
        weight = 0.0;
    }

    BoxNew(double len, double wt) {
        super(len);
        weight = wt;
    }
}
```

```

    } BoxNew(double w, double h, double d, double wt) {
        super(w, h, d);
        weight = wt;
    }
}

```

```

class Program10 {
    public static void main(String[] args) {
        BoxNew b1 = new BoxNew(),
            b2 = new BoxNew(5, 30),
            b3 = new BoxNew(4, 7, 5, 12);

        out.println("b1.volume() : " + b1.volume());
        out.println("b2.volume() : " + b2.volume());
        out.println("b3.volume() : " + b3.volume());
    }
}

```

### **OUTPUT:**

```

F:\java lab file>javac "lab 10.java"

F:\java lab file>java Program10
b1.volume() : -1.0
b2.volume() : 125.0
b3.volume() : 140.0

```

**Question 10. Write a Java program to implement interface. Create an interface named shape having area () & perimeter () as its methods. Create three classes circle, rectangle & square that implement this interface.**

**Code:**

```
import static java.lang.System.out;
import static java.lang.Math.PI;
```

```
interface Shape {
    void area();
    void perimeter();
}
```

```
class Circle implements Shape {
    int radius;
```

```
    Circle(int r) {
        radius = r;
    }
```

```
    @Override
```

```
    public void area() {
        out.printf("Area of circle with radius %d is: %f\n", radius, (PI * radius * radius));
    }
```

```
    @Override
```

```
    public void perimeter() {
        out.printf("Perimeter of circle with radius %d is: %f\n", radius, (2 * PI * radius));
    }
}
```

```
class Rectangle implements Shape {
    int length, breadth;
```



```
Rectangle(int l, int b) {  
    length = l;  
    breadth = b;  
}
```

```
@Override
```

```
public void area() {  
    out.printf("Area of rectangle with length and breadth of %d, %d is: %d\n",  
        length, breadth, (length * breadth));  
}
```

```
@Override
```

```
public void perimeter() {  
    out.printf("Perimeter of rectangle with length and breadth of %d, %d is: %d\n",  
        length, breadth, (2 * (length + breadth)));  
}  
}
```

```
class Square implements Shape {
```

```
    int side;
```

```
    Square(int s) {  
        side = s;  
    }
```

```
@Override
```

```
public void area() {  
    out.printf("Area of square with side %d is: %d\n", side, (side * side));  
}
```

@Override

```
public void perimeter() {  
    out.printf("Perimeter of square with side %d is: %d\n", side, (4 * side));  
}  
}
```

```
class Program12 {  
    public static void main(String[] args) {  
        Circle c = new Circle(8);  
        c.area();  
        c.perimeter();  
  
        out.println();  
  
        Rectangle r = new Rectangle(5, 4);  
        r.area();  
        r.perimeter();  
  
        out.println();  
  
        Square s = new Square(3);  
        s.area();  
        s.perimeter();  
    }  
}
```

## **OUTPUT:**

```
F:\java lab file>javac "lab 12.java"

F:\java lab file>java Program12
Area of circle with radius 8 is: 201.061930
Perimeter of circle with radius 8 is: 50.265482

Area of rectangle with length and breadth of 5, 4 is: 20
Perimeter of rectangle with length and breadth of 5, 4 is: 18

Area of square with side 3 is: 9
Perimeter of square with side 3 is: 12
```

### Question 11. Write a Java program to implement run time polymorphism.

#### Code:

```
import static java.lang.System.out;

interface AreaInterface {
    void findArea(int i1, int i2);
}

class Rhombus implements AreaInterface {
    @Override
    public void findArea(int d1, int d2) {
        out.println("Area of rhombus is: " + (0.5 * (d1 * d2)));
    }
}

class Triangle implements AreaInterface {
    @Override
    public void findArea(int base, int height) {
        out.println("Area of triangle is: " + (0.5 * base * height));
    }
}

class Program11 {
    public static void main(String[] args) {
        AreaInterface a = new Rhombus();
        a.findArea(5, 7);
        a = new Triangle();
        a.findArea(4, 5);
    }
}
```

#### OUTPUT:

```
F:\java lab file>javac "lab 11.java"
F:\java lab file>java Program11
Area of rhombus is: 17.5
Area of triangle is: 10.0
```

**Question 12. Write a Java program to show multiple inheritance.**

**Code:**

```
import static java.lang.System.out;

class Student {
    int rollNumber;
    String name;

    void setInfo(int rn, String nm) {
        rollNumber = rn;
        name = nm;
    }

    void printInfo() {
        out.println(name);
        out.println("Roll number: " + rollNumber);
    }
}

class Test extends Student {
    int marks1, marks2;

    Test(int m1, int m2) {
        marks1 = m1;
        marks2 = m2;
    }

    void printMarks() {
        out.println("Marks Obtained:-");
        out.println("MArks 1: " + marks1);
        out.println("MArks 2: " + marks2);
    }
}
```

```
}
```

```
interface Sports {  
    int marks = 10;  
    void putMarks();  
}
```

```
class Result extends Test implements Sports {  
    int total;
```

```
    Result(int m1, int m2) {  
        super(m1, m2);  
        total = marks1 + marks2 + marks;  
    }
```

```
    @Override  
    public void putMarks() {  
        out.println("Sports Marks: " + marks);  
    }
```

```
    void display() {  
        printInfo();  
        printMarks();  
        putMarks();  
        out.println("total: " + total);  
    }  
}
```

```
class Program13 {  
    public static void main(String[] args) {  
        Result result = new Result(30, 60);  
        result.setInfo(5, "John");
```

```
        result.display();  
    }  
}
```

### **OUTPUT:**

```
F:\java lab file>javac "lab 13.java"  
  
F:\java lab file>java Program13  
John  
Roll number: 5  
Marks Obtained:-  
MArks 1: 30  
MArks 2: 60  
Sports Marks: 10  
total: 100
```

**Question 13: Create a user defined exception named “nomatchexception” that is fired when the string entered by the user is not “india”.**

**Code:**

```
import static java.lang.System.out;
import java.util.Scanner;

class NoMatchException extends Exception {
    String detail;

    public NoMatchException(String dtl) {
        detail = dtl;
    }

    @Override
    public String toString() {
        return String.format("NoMatchException[%s]", detail);
    }
}

class Program17 {
    static void checkAndThrow() throws NoMatchException {
        Scanner input = new Scanner(System.in);
        out.print("Enter some word: ");
        String s = input.nextLine();
        if (!(s.equals("india") || s.equals("India") || s.equals("INDIA")))) {
            throw new NoMatchException("Input is not India");
        }
        out.println("Normal Exit.");
    }

    public static void main(String[] args) {
        try {
```



```
        checkAndThrow();
    } catch (NoMatchException e) {
        out.println("Caught error: " + e);
    }
}
}
```

### **OUTPUT:**

```
F:\java lab file>javac "lab 17.java"
F:\java lab file>java Program17
Enter some word: Bhutan
Caught error: NoMatchException[Input is not India]
```

**Question 14: Write a Java program to show even & odd numbers by thread.**

**import static java.lang.System.out;**

**Code:**

```
class OddNumbersThread extends Thread {  
    @Override  
    public void run() {  
        try {  
            for (int i = 1; i <= 10; i += 2) {  
                out.println("Odd Number: " + i);  
                Thread.sleep(5);  
            }  
        } catch (InterruptedException e) {  
            out.println("Caught error: " + e);  
        }  
    }  
}
```

```
class EvenNumbersThread extends Thread {  
    @Override  
    public void run() {  
        try {  
            for (int i = 2; i <= 10; i += 2) {  
                out.println("Even Number: " + i);  
                Thread.sleep(5);  
            }  
        } catch (InterruptedException e) {  
            out.println("Caught error: " + e);  
        }  
    }  
}
```

```
class Program18 {  
    public static void main(String[] args) {  
        new OddNumbersThread().start();  
        new EvenNumbersThread().start();  
    }  
}
```

### **OUTPUT:**

```
F:\java lab file>javac "lab 18.java"  
  
F:\java lab file>java Program18  
Odd Number: 1  
Even Number: 2  
Odd Number: 3  
Even Number: 4  
Odd Number: 5  
Even Number: 6  
Odd Number: 7  
Even Number: 8  
Odd Number: 9  
Even Number: 10
```

**Question 15: Write a Java program to implement vector [use: addelement(), elementat(), removeElement(), size().]**

**Code:**

```
import java.util.Scanner; import java.util.Vector;

class Program16 {
public static void main(String[] args) { Vector<String> list = new Vector<String>(); int n = 0;
Scanner scanner = new Scanner(System.in); outerLoop:
while (true) {
System.out.print("\nVector Operations: \n\n1.Add Element\n2.Element At\n3.Remove
At\n4.Size\n5.Exit");
System.out.print("\n\nOption:"); n = scanner.nextInt();
switch (n) {
case 1:

break; case 2:
System.out.print("Enter new Element: "); list.add(scanner.next());

System.out.print("Enter Index: ");

System.out.println(list.elementAt(scanner.nextInt()));
break; case 3:
System.out.print("Enter Index to Remove Element: ");

System.out.println(list.remove(scanner.nextInt())); break;
case 4:
System.out.println("Size="+list.size());
break; case 5:
break outerLoop;
}
}
}
}
```

## **OUTPUT:**

Vector Operations:

- 1.Add Element
- 2.Element At
- 3.Remove At
- 4.Size
- 5.Exit

Option:1

Enter new Element: 55

Vector Operations:

- 1.Add Element
- 2.Element At
- 3.Remove At
- 4.Size
- 5.Exit

Option:2

Enter Index: 0

55

Vector Operations:

- 1.Add Element
- 2.Element At
- 3.Remove At
- 4.Size
- 5.Exit

Option:3

Enter Index to Remove Element: 0

55

Vector Operations:

- 1.Add Element
- 2.Element At
- 3.Remove At
- 4.Size
- 5.Exit

Option:4

Size=0

Vector Operations:

- 1.Add Element
- 2.Element At
- 3.Remove At
- 4.Size
- 5.Exit

Option:5

**QUESTION 16: Write a Java program to retrieve an element (at a specified index) from a given array list.**

**CODE:**

```
import java.util.ArrayList;

class Program20 {

    public static void main(String[] args) {
        ArrayList<Integer> arr = new ArrayList<Integer>(4);
        arr.add(15);
        arr.add(25);
        arr.add(35);
        arr.add(45);
        System.out.println("ARRAY LIST: " + arr); int
        element = arr.get(3);
        System.out.println("THE ELEMENT AT INDEX 3: " + element);
    }
}
```

**OUTPUT:**

```
F:\java lab file>javac "lab 20.java"

F:\java lab file>java Program20
ARRAY LIST: [15, 25, 35, 45]
THE ELEMENT AT INDEX 3: 45
```

**QUESTION 17: Write a Java program to demonstrate the use of equals(), trim(), length(), substring(), compareTo() of string class.**

**CODE:**

```
class Program24 {
    public static void main(String args[]) {
        String str1="Mohan";
        String str2="Mohan";
        String str3="My Name Is Mohan";
        String str4="    Remove Space";

        System.out.println(str1.equals(str2)); System.out.println("String
        Without Trim: "+str4); System.out.println("Trimmed String: " +
        str4.trim());
        System.out.println("Length of string (" + str3 + "): " + str3.length());
        System.out.println("Substring (" +str3+"): " + str3.substring(4));
        System.out.println(str1.compareTo(str2)); System.out.println(str1.compareTo(str3));

    }
}
```

**OUTPUT:**

```
F:\java lab file>javac "lab 24.java"

F:\java lab file>java Program24
true
String Without Trim:    Remove Space
Trimmed String: Remove Space
Length of string (My Name Is Mohan):  16
Substring (My Name Is Mohan): ame Is Mohan
0
-10
```

**QUESTION 18: Write a Java program to demonstrate the use of equals() and == in Java.**

**CODE:**

```
class Program25 {  
    public static void main(String args[]) {  
        String str1 ="Hello World";  
        String str2 ="Hello World";  
        String str3 = new String("Hello World");  
  
        System.out.println(str1.equals(str2));  
        System.out.println(str1==str2);  
        System.out.println(str1==str3);  
        System.out.println(str1.equals(str3));  
  
    }  
}
```

**OUTPUT:**

```
F:\java lab file>javac "lab 25.java"  
  
F:\java lab file>java Program25  
true  
true  
false  
true
```



**QUESTION 19: Write a Java program to check a word contains the character 'g' in a given string.**

**CODE:**

```
import java.util.Scanner;

class Program42 {

    public static void main(String[] args) {
        Scanner input = new Scanner(System.in);
        System.out.print("Enter some string: ");
        String s = input.nextLine();
        if (s.contains("g")) {
            System.out.println("String \"" + s + "\" contains character 'g'");
        } else {
            System.out.println("String \"" + s + "\" does not contains character 'g'");
        }
    }
}
```

**OUTPUT**

```
F:\java lab file>javac "lab 42.java"

F:\java lab file>java Program42
Enter some string: good morning
String "good morning" contains character 'g'
```



## QUESTION 22: Write a Java program on anonymous classes.

### CODE:

```
class Animal {
    public void makeSound() {
        System.out.println("The animal is making some sound.");
    }
}

class Program40 {
    public static void main(String[] args) {
        Animal dog = new Animal() {
            @Override
            public void makeSound() {
                System.out.println("Woof woof!!");
            }
        };

        dog.makeSound();
    }
}
```

### OUTPUT:

```
F:\java lab file>javac "lab 40.java"

F:\java lab file>java Program40
Woof woof!!
```

**QUESTION 23: Write a Java program to highlight the structure/syntax of a lambda expression.**

**CODE:**

```
@FunctionalInterface
interface Operation { int
    calculate(int a);
}

class Program41 {
    public static void main(String[] args) {
        Operation square = (a) -> a * a;
        int num = 5;
        int result = square.calculate(num); System.out.printf("Square
        of %d is: %d", num, result);
    }
}
```

**OUTPUT:**

```
F:\java lab file>javac "lab 41.java"

F:\java lab file>java Program41
Square of 5 is: 25
F:\java lab file>_
```

## QUESTION 24: Write a Java program to show database connectivity

### CODE:

```
import java.sql.*;

class Program24

{
public static void main(String[] args)
{
    Connection connection = null;
    String query;
    ResultSet result; try
    {
        Class.forName("com.mysql.cj.jdbc.Driver");
        connection = DriverManager.getConnection("jdbc:mysql://localhost:3308/",
            "12345", "12345");

        Statement stmt = connection.createStatement();
        query = "CREATE DATABASE java_database";
        stmt.executeUpdate(query);
        System.out.println("Database Created Successfully!!");
        connection.close();
    }

    catch (Exception exception)
    {
        System.out.println(exception);
    }
}
}
```

Database Created Successfully!!

```
mysql> SHOW DATABASES;
+-----+
| Database |
+-----+
| information_schema |
| java_database |
| mysql |
| performance_schema |
| sys |
+-----+
5 rows in set (0.00 sec)
```

**QUESTION 25: Write a Java program in Java to insert, update, delete & select records.**

**CODE:**

```
import java.sql.*;

class Program37

{
    public static void main(String[] args)
    {
        Connection connection = null;
        String query;
        ResultSet result; try
        {
            Class.forName("com.mysql.cj.jdbc.Driver");
            connection =
DriverManager.getConnection("jdbc:mysql://localhost:3308/java_database","12345", "12345");

            Statement stmt = connection.createStatement();

            query = "INSERT INTO Recipies(recipe_id, recipe_name)"
                + " VALUES"
                + "(6,\"Momos\"), "
                + "(7,\"Spring Roll\"), "
                + "(8,\"Burger\"), "
                + "(9,\"Pizza\"), "
                + "(10,\"Garlic Bread\")); ";
            stmt.executeUpdate(query); System.out.println("Inserted
records into the table...");

            query = "SELECT * FROM Recipies;";
            result = stmt.executeQuery(query);
            while(result.next()){
                System.out.print("Recipie ID: " + result.getInt("recipe_id"));
                System.out.print("Recipie Name: " + result.getString("recipe_name"));
                System.out.println("\n");
            }

            query = "UPDATE Recipies " +
"SET recipe_name = 'My Recipie' WHERE recipe_id = 4";
            stmt.executeUpdate(query);
            System.out.println("Record Successfully Updated!!!!\n");
            query = "SELECT * FROM Recipies;";
            result = stmt.executeQuery(query);
```

```
while(result.next()){
    System.out.print("Recipie ID: " + result.getInt("recipe_id"));
    System.out.print("Recipie Name: " + result.getString("recipe_name"));
    System.out.println("\n");
}
```

```
query = "DELETE FROM Recipies where recipe_id = 3";
stmt.executeUpdate(query);
System.out.println("Record Successfully Deleted!!!!\n");
query = "SELECT * FROM Recipies;";
result = stmt.executeQuery(query);
while(result.next()){
    System.out.print("Recipie ID: " + result.getInt("recipe_id"));
    System.out.print("|Recipie Name: " + result.getString("recipe_name"));
    System.out.println("\n");
}
```

```
connection.close();
}
catch (Exception exception)
{
    System.out.println(exception);
}
```

```
}
}
```



## OUTPUT:

```
Inserted records into the table...
Recipe ID: 8Recipe Name: Burger

Recipe ID: 3Recipe Name: Cucumber Salad

Recipe ID: 10Recipe Name: Garlic Bread

Recipe ID: 5Recipe Name: Grilled Cheeze

Recipe ID: 6Recipe Name: Momos

Recipe ID: 4Recipe Name: Pasta

Recipe ID: 9Recipe Name: Pizza

Recipe ID: 7Recipe Name: Spring Roll

Recipe ID: 1Recipe Name: Tacos

Recipe ID: 2Recipe Name: Tomato Soup

Record Successfully Updated!!!!

Recipe ID: 8Recipe Name: Burger

Recipe ID: 3Recipe Name: Cucumber Salad

Recipe ID: 10Recipe Name: Garlic Bread

Recipe ID: 5Recipe Name: Grilled Cheeze

Recipe ID: 6Recipe Name: Momos

Recipe ID: 4Recipe Name: My Recipe

Recipe ID: 9Recipe Name: Pizza

Recipe ID: 7Recipe Name: Spring Roll

Recipe ID: 1Recipe Name: Tacos

Recipe ID: 2Recipe Name: Tomato Soup
```

Record Successfully Deleted!!!!

Recipie ID: 8|Recipie Name: Burger

Recipie ID: 10|Recipie Name: Garlic Bread

Recipie ID: 5|Recipie Name: Grilled Cheeze

Recipie ID: 6|Recipie Name: Momos

Recipie ID: 4|Recipie Name: My Recipie

Recipie ID: 9|Recipie Name: Pizza

Recipie ID: 7|Recipie Name: Spring Roll

Recipie ID: 1|Recipie Name: Tacos

Recipie ID: 2|Recipie Name: Tomato Soup



