**1. find the output of following code.**

**public class Calculator**

**{**

**int result;**

**public void add(int num1, int num2) {**

**result = num1 + num2;**

**}**

**public void subtract(int num1, int num2) {**

**result = num1 - num2;**

**}**

**public int getResult() {**

**return result;**

**}**

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

**Calculator calculator = new Calculator();**

**int num1 = 10;**

**int num2 = 5;**

**calculator.add(num1, num2);**

**System.out.println("Addition result: " + calculator.getResult());**

**calculator.subtract(num1, num2);**

**System.out.println("Subtraction result: " + calculator.getResult());**

**}**

**}**

**2. find the output of following code.**

**public class OutputQuestion**

**{**

**int x = 10;**

**void modifyValue(int val) {**

**x = val \* 2;**

**}**

**int getValue() {**

**return x;**

**}**

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

**OutputQuestion obj1 = new OutputQuestion();**

**OutputQuestion obj2 = obj1;**

**OutputQuestion obj3 = new OutputQuestion();**

**obj2.modifyValue(5);**

**obj3.modifyValue(7);**

**System.out.println("obj1 value: " + obj1.getValue());**

**System.out.println("obj2 value: " + obj2.getValue());**

**System.out.println("obj3 value: " + obj3.getValue());**

**}**

**}**

**3. find the output of following code.**

**public class MyClass**

**{**

**private int x;**

**public MyClass() {**

**x = 5;**

**}**

**public void setX(int value) {**

**x = value;**

**}**

**public int getX() {**

**return x;**

**}**

**public void incrementX() {**

**x++;**

**}**

**public void printX() {**

**System.out.println("The value of x is: " + x);**

**}**

**}**

**public class Main {**

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

**MyClass obj1 = new MyClass();**

**MyClass obj2 = new MyClass();**

**obj1.setX(10);**

**obj2.incrementX();**

**obj1.printX();**

**obj2.printX();**

**}**

**}**

**4.find the output of following code.**

**public class OutputQuestion**

**{**

**private int number;**

**public OutputQuestion(int num)**

**{**

**number = num;**

**}**

**public int calculateSquare()**

**{**

**return number \* number;**

**}**

**public int calculateCube() {**

**return number \* number \* number;**

**}**

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

**{**

**OutputQuestion obj = new OutputQuestion(5);**

**int squareResult = obj.calculateSquare();**

**int cubeResult = obj.calculateCube();**

**System.out.println("Number: " + obj.number);**

**System.out.println("Square: " + squareResult);**

**System.out.println("Cube: " + cubeResult);**

**}**

**}**

**5. find the output of following code.**

**public class VariableMethodQuestion {**

**int x = 5;**

**void modifyValue(int y)**

**{**

**x = x + y;**

**}**

**void printValue()**

**{**

**System.out.println("Value of x: " + x);**

**}**

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

**VariableMethodQuestion obj = new VariableMethodQuestion();**

**int a = 10;**

**int b = 20;**

**obj.modifyValue(a);**

**obj.printValue();**

**obj.modifyValue(b);**

**obj.printValue();**

**}**

**}**

**6. find the output of following code.**

**public class Rectangle**

**{**

**int length;**

**int width;**

**public int calculateArea() {**

**return length \* width;**

**}**

**public void displayDetails()**

**{**

**System.out.println("Rectangle Length: " + length);**

**System.out.println("Rectangle Width: " + width);**

**System.out.println("Rectangle Area: " + calculateArea());**

**}**

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

**{**

**Rectangle rectangle = new Rectangle();**

**rectangle.length = 5;**

**rectangle.width = 10;**

**rectangle.displayDetails();**

**}**

**}**

**7. find the output of following code.**

**public class VariableAndMethodExample {**

**private static int num1 = 10;**

**private int num2 = 5;**

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

**{**

**VariableAndMethodExample obj1 = new VariableAndMethodExample();**

**VariableAndMethodExample obj2 = new VariableAndMethodExample();**

**obj1.num1 = 20;**

**obj1.num2 = 15;**

**obj2.num2 = 30;**

**int result1 = obj1.calculateSum();**

**int result2 = obj2.calculateSum();**

**System.out.println("Result 1: " + result1);**

**System.out.println("Result 2: " + result2);**

**}**

**private int calculateSum()**

**{**

**return num1 + num2;**

**}**

**}**

**8. find the output of following code.**

**public class OutputQuestion {**

**int x = 10;**

**int y = 5;**

**public int addNumbers(int a, int b)**

**{**

**return a + b;**

**}**

**public int multiplyNumbers(int a, int b)**

**{**

**return a \* b;**

**}**

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

**{**

**OutputQuestion obj = new OutputQuestion();**

**int result1 = obj.addNumbers(obj.x, obj.y);**

**int result2 = obj.multiplyNumbers(obj.x, obj.y);**

**int sum = obj.addNumbers(result1, result2);**

**System.out.println("Sum of the results: " + sum);**

**}**

**}**

**9. find the output of following code.**

**public class VariableMethodQuestion**

**{**

**int num = 10;**

**void modifyVariable(int value)**

**{**

**num = value;**

**}**

**void printVariable()**

**{**

**System.out.println("Value of num: " + num);**

**}**

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

**VariableMethodQuestion obj1 = new VariableMethodQuestion();**

**VariableMethodQuestion obj2 = new VariableMethodQuestion();**

**obj1.modifyVariable(20);**

**obj1.printVariable();**

**obj2.printVariable();**

**}**

**}**

**10. find the Result of following code.**

**public class A {**

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

**{**

**System.out.println('j' + 'a' + 'v' + 'a');**

**}**

**}**

* **a) java**
* **b) Something else (Other than simple concatenation)**

**11. find the output of following code.**

**public class Demo{**

**public static void main(String[] arr){**

**}**

**public static void main(String arr){**

**}**

**}**

* **a) Nothing**
* **b) Error**

**12. find the output of following code.**

**class Test {**

**protected int x, y;**

**}**

**class Main {**

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

**Test t = new Test();**

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

**}**

**}**

**13. find the output of following code.**

**class Main {**

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

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

**}**

**int fun() {**

**return 20;**

**}**

**}**

**14.find the output of following code.**

**class Main {**

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

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

**}**

**static int fun() {**

**return 20;**

**}**

**}**

**15.find the output of following code.**

**class Main {**

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

**Main obj = new Main();**

**System.out.println(obj.fun());**

**}**

**int fun() {**

**return 20;**

**}**

**}**

**16.find the output of following code.**

**class Test {**

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

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

**}**

**static int fun() {**

**static int x= 0;**

**return ++x;**

**}**

**}**

**17.find the output of following code.**

**class Test {**

**private static int x;**

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

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

**}**

**static int fun() {**

**return ++x;**

**}**

**}**

**18.find the output of following code.**

**class Point {**

**protected int x, y;**

**public Point(int \_x, int \_y)**

**{**

**x = \_x;**

**y = \_y;**

**}**

**}**

**public class Main {**

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

**{**

**Point p = new Point();**

**System.out.println("x = " + p.x + ", y = " + p.y);**

**}**

**}**

**19.find the output of following code.**

**class Test**

**{**

**int x = 10;**

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

**{**

**Test t = new Test();**

**System.out.println(t.x);**

**}**

**}**

**20.find the output of following code.**

**class Test**

**{**

**int y = 2;**

**int x = y + 2;**

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

**{**

**Test m = new Test();**

**System.out.println("x = " + m.x + ", y = " + m.y);**

**}**

**}**

**21.find the output of following code.**

**public class Test**

**{**

**int x = 2;**

**Test(int i) { x = i; }**

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

**{**

**Test t = new Test(5);**

**System.out.println("x = " + t.x);**

**}**

**}**

**22.find the output of following code.**

**class Test1**

**{**

**Test1(int x)**

**{**

**System.out.println("Constructor called " + x);**

**}**

**}**

**23.find the output of following code.**

**class Test2**

**{**

**Test1 t1 = new Test1(10);**

**Test2(int i)**

**{**

**t1 = new Test1(i);**

**}**

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

**{**

**Test2 t2 = new Test2(5);**

**}**

**}**

**24.find the output of following code.**

**public class Calculator**

**{**

**int num = 100;**

**public void calc(int num)**

**{**

**this.num = num \* 10;**

**}**

**public void printNum()**

**{**

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

**}**

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

**{**

**Calculator obj = new Calculator();**

**obj.calc(2);**

**obj.printNum();**

**}**

**}**

**25.find the output of following code.**

**class Gfg**

**{**

**Gfg()**

**{**

**System.out.println("ABC");**

**}**

**static Gfg a = new Gfg();**

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

**{**

**Gfg b;**

**b = new Gfg();**

**}**

**}**

**26.find the output of following code.**

**public class const\_example {**

**const\_example() {**

**system.out.println("Inside constructor");**

**}**

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

**const\_example c1 = new const\_example();**

**const\_example c2 = new const\_example();**

**}**

**}**

**27.find the output of following code.**

**public class VariableMethodExample**

**{**

**int instanceVariable = 10;**

**void modifyValue(int value)**

**{**

**instanceVariable += value;**

**}**

**void printValue()**

**{**

**System.out.println("Instance variable value: " + instanceVariable);**

**}**

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

**{**

**VariableMethodExample example = new VariableMethodExample();**

**example.printValue();**

**example.modifyValue(5);**

**example.printValue();**

**int localVar = 7;**

**example.modifyValue(localVar);**

**example.printValue();**

**}**

**}**

**29.find the output of following code.**

**public class VariableMethodOutput {**

**int x = 10;**

**void modify(int value) {**

**x = value;**

**}**

**void display() {**

**System.out.println("Value of x: " + x);**

**}**

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

**VariableMethodOutput obj1 = new VariableMethodOutput();**

**VariableMethodOutput obj2 = obj1;**

**obj1.modify(20);**

**obj1.display();**

**obj2.display();**

**obj2.modify(30);**

**obj1.display();**

**obj2.display();**

**}**

**}**

**30.find the output of following code.**

**public class VariableMethodExample**

**{**

**static int x = 5;**

**int y = 10;**

**public void modifyValues(int a, int b)**

**{**

**x += a;**

**y += b;**

**}**

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

**VariableMethodExample instance1 = new VariableMethodExample();**

**VariableMethodExample instance2 = new VariableMethodExample();**

**instance1.modifyValues(2, 3);**

**instance2.modifyValues(4, 1);**

**System.out.println("Instance 1 - x: " + instance1.x + ", y: " + instance1.y);**

**System.out.println("Instance 2 - x: " + instance2.x + ", y: " + instance2.y);**

**}**

**}**

**31.find the output of following code.**

**public class VariableMethodQuestion**

**{**

**int x = 5;**

**void modifyValue(int val) {**

**x += val;**

**}**

**void printValue() {**

**System.out.println("Value: " + x);**

**}**

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

**VariableMethodQuestion obj = new VariableMethodQuestion();**

**obj.printValue();**

**obj.modifyValue(3);**

**obj.printValue();**

**int newValue = 7;**

**obj.modifyValue(newValue);**

**obj.printValue();**

**VariableMethodQuestion anotherObj = new VariableMethodQuestion();**

**anotherObj.modifyValue(10);**

**anotherObj.printValue();**

**}**

**}**