

TEST 6(26-07-2024)

Set A

1)

```
import java.util.ArrayList;
import java.util.List;

public class Test {
    public static void main(String[] args) {
        List<Object> list = new ArrayList<>();
        list.add("Hello");
        list.add(123);
        for (Object obj : list) {
            if (obj instanceof String) {
                String str = (String) obj;
                System.out.println(str);
            } else {
                System.out.println("Not a string: " + obj);
            }
        }
    }
}
```

```
java -cp /tmp/kLCYWICVfp/Test
Hello
Not a string: 123

=== Code Execution Successful ===
```

2)

```
class Car {
    public String model;
    public int year;

    public Car(String model, int year) {
        this.model = model;
        this.year = year;
    }

    public void display() {
        System.out.println(model + " " + year);
    }
}

public class CarTest {
    public static void main(String[] args) {
        Car car = new Car("Toyota", 2020);
        car.display();
    }
}
```

```
java -cp /tmp/up18YvM9cI/CarTest
Toyota 2020

=== Code Execution Successful ===
```

3)

```
class calculator {
    public int divide(int a, int b) {
        return a / b;
    }
}

public class TestCalculato {
    public static void main(String[] args) {
        calculator calc = new calculator();
        try {
            int result = calc.divide(10, 0);
            System.out.println(result);
        } catch (ArithmeticException e) {
            System.out.println("Cannot divide by zero.");
        }
    }
}
```

```
java -cp /tmp/F0aw2ZvIIC/TestCalculato
Cannot divide by zero.

=== Code Execution Successful ===
```

4)

```
public class ArrayIndexOutOfBoundsException {
    public static void main(String[] args) {
        int[] numbers = {1, 2, 3};
        try {
            System.out.println(numbers[3]);
        } catch (ArrayIndexOutOfBoundsException e) {
            System.out.println("Caught ArrayIndexOutOfBoundsException.");
        }
    }
}
```

```
java -cp /tmp/YL4F31Mo7q/ArrayIndexOutOfBoundsException
Caught ArrayIndexOutOfBoundsException.

=== Code Execution Successful ===
```