

## QUIZ

<b>Started on</b>	Wednesday, 6 December 2023, 10:01 PM
<b>State</b>	Finished
<b>Completed on</b>	Wednesday, 6 December 2023, 10:05 PM
<b>Time taken</b>	4 mins 44 secs
<b>Grade</b>	<b>10.00</b> out of 40.00 (25%)

**Question 1**

Incorrect

Mark 0.00 out of 1.00

Given this code segment:

```
BufferedReader br = new BufferedReader(new InputStreamReader(System.in));  
String integer = br.readLine();  
// CODE
```

```
System.out.println(val);
```

Which one of the following statements when replaced by the comment CODE will successfully read an integer value from console

- ☒ a. `int val = String.parseInt(integer);` ✖
- ☐ b. `int val = Integer.parseInt(integer);`
- ☐ c. `int val = integer.getInteger();`
- ☐ d. `int val = Number.parseInt(integer);`

Your answer is incorrect.

The correct answer is:

`int val = Integer.parseInt(integer);`

**Question 2**

Incorrect

Mark 0.00 out of 1.00

Choose the correct option based on this code segment:

```
Path path = Paths.get("file.txt"); // READ_FILE
```

```
lines.forEach(System.out.println);
```

Assume that a file named "file.txt" exists in the directory in which this code segment is run and has the content "hello". Which one of these options can be replaced by the text `READ_FILE` that will successfully read the "file.txt" and print "hello" on the console?

- ☒ a. `Stream<String> lines = File.readLines(path);` ✖
- ☐ b. `List<String> lines = Files.lines(path);`
- ☐ c. `Stream<String> lines = Files.readAllLines(path);`
- ☐ d. `Stream<String> lines = Files.lines(path);`

Your answer is incorrect.

The correct answer is:

`Stream<String> lines = Files.lines(path);`

**Question 3**

Correct

Mark 1.00 out of 1.00

Choose the correct option based on this code segment:

```
Stream ints = Stream.of(1, 2, 3, 4);
```

```
boolean result = ints.parallel().map(Function.identity()).isParallel();
```

```
System.out.println(result);
```

- ☒ a. This code segment prints: true ✔
- ☐ b. This code segment throws `InvalidParallelizationException` for the call `parallel()`
- ☐ c. This code segment prints: false
- ☐ d. This code segment results in compiler error(s)

Your answer is correct.

The correct answer is:

This code segment prints: true

**Question 4**

Incorrect

Mark 0.00 out of 1.00

Which one of the following interfaces declares a single abstract method named `iterator()`?

(Note: Implementing this interface allows an object to be the target of the for-each statement.)

- ☒ a. `Enumeration<E>` ❌
- ☐ b. `Iterator<T>`
- ☐ c. `ForEach<T>`
- ☐ d. `Iterable<T>`

Your answer is incorrect.

The correct answer is:

`Iterable<T>`

**Question 5**

Correct

Mark 1.00 out of 1.00

Given this class definition:

```
class Point {  
    private int x = 0, y;  
    public Point(int x, int y) {  
        this.x = x;  
        this.y = y;  
    }  
    // DEFAULT_CTOR  
}
```

Which one of the following definitions of the Point constructor can be replaced without compiler errors in place of the comment `DEFAULT_CTOR`?

- ☒ a. `private Point() { this(0, 0); }` ✔️
- ☐ b. `public Point() { super(); this(0, 0); }`
- ☐ c. `public Point() { this(0, 0); super(); }`
- ☐ d. `public Point() { this(); }`

Your answer is correct.

The correct answer is:

`private Point() { this(0, 0); }`

**Question 6**

Correct

Mark 1.00 out of 1.00

Consider the following code segment:

```
while( (ch = inputFile.read()) != VALUE) {  
    outputFile.write( (char)ch );  
}
```

Assume that `inputFile` is of type `FileReader`, and `outputFile` is of type `FileWriter`, and `ch` is of type `int`. The method `read()` returns the character if successful, or `VALUE` if the end of the stream has been reached. What is the correct value of this `VALUE` checked in the while loop for end-of-stream?

- ☒ a. -1 ✓
- ☐ b. 255
- ☐ c. Integer.MAX\_VALUE
- ☐ d. 0

Your answer is correct.

The correct answer is:

-1

**Question 7**

Incorrect

Mark 0.00 out of 1.00

Given this code segment:

```
LocalDate joiningDate = LocalDate.of(2014,Month.SEPTEMBER, 20);  
LocalDate now = LocalDate.of(2015, Month.OCTOBER,20);  
// GET_YEARS  
System.out.println(years);
```

- ☒ a. `Period years = Period.between(joiningDate, now).getYears();` ✗
- ☐ b. `int years = Period.between(joiningDate, now).getYears();`
- ☐ c. `Duration years = Period.between(joiningDate, now).getYears();`
- ☐ d. `Instant years = Period.between(joiningDate, now).getYears();`

Your answer is incorrect.

The correct answer is:

`int years = Period.between(joiningDate, now).getYears();`

**Question 8**

Correct

Mark 1.00 out of 1.00

Consider the following program:

```
public class Outer {  
    private int mem = 10;  
    class Inner {  
        private int imem = new Outer().mem; // ACCESS1  
    }  
    public static void main(String []s) { System.out.println(new Outer().new Inner().imem); //ACCESS2  
    }  
}
```

Which one of the following options is correct?

- ☒ a. When executed, this program prints 0 ✓
- ☐ b. When compiled, this program will result in a compiler error in line marked with comment ACCESS2
- ☐ c. When compiled, this program will result in a compiler error in line marked with comment ACCESS1
- ☐ d. When executed, this program prints 10

Your answer is correct.

The correct answer is:

When executed, this program prints 0

**Question 9**

Incorrect

Mark 0.00 out of 1.00

What will be the output of the following program?

```
class Base {
    public Base() {
        System.out.println("Base");
    }
}
class Derived extends Base {
    public Derived() {
        System.out.println("Derived");
    }
}
class DeriDerived extends Derived {
    public DeriDerived(){
        System.out.println("DeriDerived");
    }
}
class Test {
    public static void main(String []args) {
        Derived b = new DeriDerived();
    }
}
```

- ☒ a. DeriDerived ❌
- ☐ b. Base Derived DeriDerived
- ☐ c. Derived DeriDerived
- ☐ d. DeriDerived Derived
- ☐ e. DeriDerived Derived Base

Your answer is incorrect.

The correct answer is:

Base Derived DeriDerived

**Question 10**

Incorrect

Mark 0.00 out of 1.00

Given this code snippet:

```
public static Connection connectToDb() throws SQLException {  
    String url = "jdbc:mysql://localhost:3306/";  
    String database = "addressBook";  
    String userName = "root";  
    String password = "mysql123";  
    // CONNECT_TO_DB  
}
```

Which one of the following statements will you replace with the comment CONNECT\_TO\_DB to create a Connection object?

- ☒ a. return DriverManager.getConnection(url, database, userName,password); ❌
- ☐ b. return DriverManager.getConnection(url + database, userName,password);
- ☐ c. return Connection.getConnection(url, database, userName,password);
- ☐ d. return DriverManager.getConnection(url + database, userName,password);

Your answer is incorrect.

The correct answer is:

return DriverManager.getConnection(url + database, userName,password);

**Question 11**

Incorrect

Mark 0.00 out of 1.00

Choose the correct option based on this code segment:

```
List ints = Arrays.asList(1, 2, 3, 4, 5);  
ints.replaceAll(i -> i * i); // LINE  
System.out.println(ints);
```

- ☒ a. This code segment prints: [1, 2, 3, 4, 5] ❌
- ☐ b. This code segment throws java.lang.UnsupportedOperationException
- ☐ c. This code segment results in a compiler error in the line marked with the comment LINE
- ☐ d. This program prints: [1, 4, 9, 16, 25]

Your answer is incorrect.

The correct answer is:

This program prints: [1, 4, 9, 16, 25]

**Question 12**

Correct

Mark 1.00 out of 1.00

Which one of the following options is best suited for generating random numbers in a multi-threaded application?

- ☒ a. Using `java.util.concurrent.ThreadLocalRandom` ✓
- ☐ b. Using `java.util.RandomAccess`
- ☐ c. Using `java.util.RandomThread`
- ☐ d. Using `java.lang.Math.random()`

The correct answer is: `Using java.util.concurrent.ThreadLocalRandom`

**Question 13**

Incorrect

Mark 0.00 out of 1.00

Consider the following definitions:

```
interface BI {}
```

```
interface DI extends BI {}
```

The following options provide definitions of a template class X. Which one of the options specifies class X with a type parameter whose upper bound declares DI to be the super type from which all type arguments must be derived?

- ☒ a. `class X <T implements DI> {}` ✗
- ☐ b. `class X <T extends ? & DI> {}`
- ☐ c. `class X <T extends DI> {}`
- ☐ d. `class X <T super DI> {}`

Your answer is incorrect.

The correct answer is:

`class X <T extends DI> {}`



**Question 14**

Incorrect

Mark 0.00 out of 1.00

Given this code segment:

```
final CyclicBarrier barrier = new CyclicBarrier(3, () -> System.out.println("Let's play"));  
// LINE_ONE  
Runnable r = () -> {  
// LINE_TWO  
    System.out.println("Awaiting");  
    try {  
        barrier.await();  
    } catch(Exception e) { /* ignore */ }  
};  
Thread t1 = new Thread(r);  
Thread t2 = new Thread(r);  
Thread t3 = new Thread(r);  
t1.start();  
t2.start();  
t3.start();
```

Choose the correct option based on this code segment.

- ☒ a. This code segment results in a compiler error in line marked with the comment LINE\_TWO ✖
- ☐ b. This code segment results in a compiler error in line marked with the comment LINE\_ONE
- ☐ c. This code prints: Awaiting Awaiting Awaiting Let's play
- ☐ d. This code prints: Let's play

Your answer is incorrect.

The correct answer is:

This code prints: Awaiting Awaiting Awaiting Let's play

**Question 15**

Incorrect

Mark 0.00 out of 1.00

Consider the following snippet:

```
int ch = 0;
try (FileReader inputFile = new FileReader(file)) {
    // #1
    System.out.print( (char)ch );
}
}
```

Which one of the following statements can be replaced with statement #1 so that the contents of the file are correctly printed on the console and the program terminates.

- ☒ a. `while( (ch = inputFile.read()) != 0) {` ❌
- ☐ b. `while( (ch = inputFile.read()) != EOF) {`
- ☐ c. `while( (ch = inputFile.read()) != null) {`
- ☐ d. `while( (ch = inputFile.read()) != -1) {`

Your answer is incorrect.

The correct answer is:

`while( (ch = inputFile.read()) != -1) {`

**Question 16**

Incorrect

Mark 0.00 out of 1.00

Given the code segment:

```
List integers = Arrays.asList(15, 5, 10, 20, 25, 0);
// GETMAX
```

Which of the code segments can be replaced for the comment marked with GETMAX to return the maximum value?

- ☒ a. `Integer max = integers.max();` ❌
- ☐ b. `Integer max = integers.stream().max((i, j) -> i - j).get();`
- ☐ c. `Integer max = integers.stream().mapToInt(i -> i).max();`
- ☐ d. `Integer max = integers.stream().max().get();`

Your answer is incorrect.

The correct answer is:

`Integer max = integers.stream().max((i, j) -> i - j).get();`

**Question 17**

Incorrect

Mark 0.00 out of 1.00

Evaluate the following Java expression, if x=3, y=5, and z=10:

**++z + y - y + z + x++**

- ☒ a. 24 ❌
- ☐ b. 20
- ☐ c. 25
- ☐ d. 23

Your answer is incorrect.

The correct answer is:

25

**Question 18**

Correct

Mark 1.00 out of 1.00

Consider the following program:

```
class WildCard {  
    interface BI {}  
    interface DI extends BI {}  
    interface DDI extends DI {}  
    static class C {}  
    static void foo(C arg) {}  
    public static void main(String []args) {  
        foo(new C()); // ONE  
        foo(new C()); // TWO  
        foo(new C()); // THREE  
        foo(new C()); // FOUR  
    }  
}
```

- ☒ a. Line marked with comment THREE will result in a compiler error ✓
- ☐ b. Line marked with comment FOUR will result in a compiler error
- ☐ c. Line marked with comment TWO will result in a compiler error
- ☐ d. Line marked with comment ONE will result in a compiler error

Your answer is correct.

The correct answer is:

Line marked with comment THREE will result in a compiler error

**Question 19**

Incorrect

Mark 0.00 out of 1.00

Given this code segment:

```
Set set = new CopyOnWriteArraySet(); // #1
set.add("2");
set.add("1");
Iterator iter = set.iterator();
set.add("3"); set.add("-1");
while(iter.hasNext()) {
    System.out.print(iter.next() + " ");
}
```

- ☒ a. This code segment the following: 1 2 ✖
- ☐ b. This code segment prints the following: -1 1 2 3
- ☐ c. This code segment prints the following: 2 1 3 -1
- ☐ d. This code segment prints the following: 2 1

Your answer is incorrect.

The correct answer is:

This code segment prints the following: 2 1

**Question 20**

Incorrect

Mark 0.00 out of 1.00

Which one of the following statements will compile without errors?

- ☒ a. Locale locale3 = new US.Locale(); ✖
- ☐ b. Locale locale1 = new Locale.US;
- ☐ c. Locale locale2 = Locale.US;
- ☐ d. Locale locale4 = Locale("US");

The correct answer is: Locale locale2 = Locale.US;

**Question 21**

Incorrect

Mark 0.00 out of 1.00

Consider the following program:

```
class Outer {  
    class Inner {  
        public void print() {  
            System.out.println("Inner: print");  
        }  
    }  
}  
class Test {  
    public static void main(String []args) {  
        // Stmt#1  
        inner.print();  
    }  
}
```

Which one of the following statements will you replace with // Stmt#1 to make the program compile and run successfully to print "Inner: print" in console?

- ☒ a. `Inner inner = new Outer.Inner();` ❌
- ☐ b. `Outer.Inner inner = new Outer.Inner();`
- ☐ c. `Outer.Inner inner = new Outer().new Inner();`
- ☐ d. `Outer.Inner inner = new Outer().Inner();`

Your answer is incorrect.

The correct answer is:

`Outer.Inner inner = new Outer().new Inner();`

**Question 22**

Incorrect

Mark 0.00 out of 1.00

For the following enumeration definition, which one of the following prints the value 2 in the console?

```
enum Pets { Cat, Dog, Parrot, Chameleon };
```

- ☒ a. `System.out.print(Pets.Parrot);` ❌
- ☐ b. `System.out.print(Pets.Parrot.value());`
- ☐ c. `System.out.print(Pets.Parrot.ordinal());`
- ☐ d. `System.out.print(Pets.indexOf("Parrot"));`

Your answer is incorrect.

The correct answer is:

`System.out.print(Pets.Parrot.ordinal());`

**Question 23**

Correct

Mark 1.00 out of 1.00

Choose the correct option based on this code segment:

```
Stream words = Stream.of("eeny", "meeny", "miny", "mo"); // LINE_ONE
String boxedString = words.collect(Collectors.joining(", ", "[", "]")); // LINE_TWO
System.out.println(boxedString);
```

- ☒ a. This program prints: [eeny, meeny, miny, mo] ✓
- ☐ b. This program prints: [eeny], [meeny], [miny], [mo]
- ☐ c. This code results in a compiler error in line marked with the comment LINE\_ONE
- ☐ d. This code results in a compiler error in line marked with the comment LINE\_TWO

Your answer is correct.

The correct answer is:

This program prints: [eeny, meeny, miny, mo]

**Question 24**

Correct

Mark 1.00 out of 1.00

Two friends are waiting for some more friends to come so that they can go to a restaurant for dinner together. Which synchronization construct could be used here to programmatically simulate this situation?

- ☒ a. `java.util.concurrent.CyclicBarrier` ✓
- ☐ b. `java.util.concurrent.locks.Lock`
- ☐ c. `java.util.concurrent.RecursiveTask`
- ☐ d. `java.util.concurrent.RecursiveAction`

The correct answer is: `java.util.concurrent.CyclicBarrier`

**Question 25**

Correct

Mark 1.00 out of 1.00

Consider the following program:

```
class ClassA {}  
interface InterfaceB {}  
class ClassC {}  
class Test extends ClassA implements InterfaceB { String msg;  
    ClassC classC;  
}
```

Which one of the following statements is true?

- ☒ a. Class Test is related to ClassC with a composition relationship. ✓
- ☐ b. Class ClassA is related with InterfaceB with an IS-A relationship.
- ☐ c. Class Test is related with String with an IS-A relationship.
- ☐ d. Class Test is related with ClassA with a HAS-A relationship.

Your answer is correct.

The correct answer is:

Class Test is related to ClassC with a composition relationship.

**Question 26**

Incorrect

Mark 0.00 out of 1.00

Choose the correct option based on the following code segment:

```
Comparator comparer = (country1, country2) -> country2.compareTo(country1);  
// COMPARE_TO  
String[] brics = {"Brazil", "Russia", "India", "China"};  
Arrays.sort(brics, null);  
Arrays.stream(brics).forEach(country -> System.out.print(country + " "));
```

- ☒ a. The program results in a compiler error in the line marked with the comment COMPARE\_TO ✗
- ☐ b. The program prints the following: Brazil Russia India China
- ☐ c. The program prints the following: Russia India China Brazil
- ☐ d. The program prints the following: Brazil China India Russia

Your answer is incorrect.

The correct answer is:

The program prints the following: Brazil China India Russia

**Question 27**

Incorrect

Mark 0.00 out of 1.00

Given the class definition:

```
class Student{  
    public Student(int r) {  
        rollNo = r;  
    }  
    int rollNo;  
}
```

Choose the correct option based on this code segment:

```
HashSet students = new HashSet<>();  
students.add(new Student(5));  
students.add(new Student(10));  
System.out.println(students.contains(new Student(10)));
```

- ☒ a. This program prints the following: true ❌
- ☐ b. This program results in compiler error(s)
- ☐ c. This program prints the following: false
- ☐ d. This program throws NoSuchElementException

Your answer is incorrect.

The correct answer is:

This program prints the following: false

**Question 28**

Incorrect

Mark 0.00 out of 1.00

In the context of Singleton pattern, which one of the following statements is true?

- ☒ a. A Singleton class must not have any static members ❌
- ☐ b. All methods of the Singleton class must be private
- ☐ c. A Singleton class has a public constructor
- ☐ d. A Factory class may use Singleton pattern

The correct answer is: A Factory class may use Singleton pattern



**Question 29**

Correct

Mark 1.00 out of 1.00

Which of the following statements is true with respect to enums?

- ☒ a. An enum can have private constructor, enum can have public methods and fields ✓
- ☐ b. An enum can extend a class
- ☐ c. An enum cannot implement an interface
- ☐ d. An enum can have public constructor

The correct answer is: An enum can have private constructor, enum can have public methods and fields

**Question 30**

Incorrect

Mark 0.00 out of 1.00

Choose the correct option for this code snippet:

```
public static void main(String []files) {  
    try (FileReader inputFile = new FileReader(new File(files[0]))) { // #1  
        inputFile.close(); // #2  
    }  
    catch (FileNotFoundException | IOException e) { // #3  
        e.printStackTrace();  
    }  
}
```

- ☒ a. The compiler will report an error at statement marked with the comment #2 ✗
- ☐ b. The code snippet will compile without any errors
- ☐ c. The compiler will report an error at statement marked with the comment #1
- ☐ d. The compiler will report an error at statement marked with the comment #3

Your answer is incorrect.

The correct answer is:

The compiler will report an error at statement marked with the comment #3

**Question 31**

Incorrect

Mark 0.00 out of 1.00

Which one of the following interfaces is empty (i.e., an interface that does not declare any methods)?

- ☒ a. `java.lang.AutoCloseable` interface ❌
- ☐ b. `java.lang.Comparable<T>` interface
- ☐ c. `java.util.concurrent.Callable<T>` interface
- ☐ d. `java.lang.Cloneable` interface

The correct answer is: `java.lang.Cloneable` interface

**Question 32**

Incorrect

Mark 0.00 out of 1.00

Given this code snippet:

```
LocalDate dateOfBirth = LocalDate.of(1988,Month.NOVEMBER, 4);
MonthDay monthDay =MonthDay.of(dateOfBirth.getMonth(), dateOfBirth.getDayOfMonth());
boolean ifTodayBirthday = monthDay.equals(MonthDay.from(LocalDate.now())); //COMPARE
System.out.println(ifTodayBirthday ? "Happy birthday!" : "Yet another day!");
```

Assume that today's date is 4th November 2015. Choose the correct answer based on this code segment.

- ☒ a. This code will print: Yet another day! ❌
- ☐ b. This code will print: Happy birthday!
- ☐ c. When executed, this code will throw `DateTimeException`
- ☐ d. This code will result in a compiler error in the line marked with the comment COMPARE

Your answer is incorrect.

The correct answer is:


This code will print: Happy birthday!

**Question 33**

Incorrect

Mark 0.00 out of 1.00

```
1. What will be the output of the following program:  
2.  
3. public class Test {  
4.     public static void main(String[] args) {  
5.         int count = 1;  
6.         while (count <= 15) {  
7.             System.out.println(count % 2 == 1 ? "***" : "++++");  
8.             ++count;  
9.         }  
10.    }  
11. }
```

- ☒ a. 15 times \*\*\* 
- ☐ b. 8 times \*\*\* and 7 times +++++
- ☐ c. 15 times +++++
- ☐ d. Both will print only once

Your answer is incorrect.

The correct answer is:

8 times \*\*\* and 7 times +++++

**Question 34**

Incorrect

Mark 0.00 out of 1.00

Choose the correct option based on this program:

```
import java.util.stream.Stream;

public class Reduce {
    public static void main(String []args) {
        Stream words = Stream.of("one", "two", "three");
        int len = words.mapToInt(String::length).reduce(0, (len1, len2) -> len1 + len2);
        System.out.println(len);
    }
}
```

- ☒ a. This program does not compile and results in compiler error(s) ❌
- ☐ b. This program prints: onetwothree
- ☐ c. This program prints: 11
- ☐ d. This program throws an IllegalArgumentException

Your answer is incorrect.

The correct answer is:

This program prints: 11

**Question 35**

Incorrect

Mark 0.00 out of 1.00

Which of the following classes in the java.util.concurrent.atomic package inherit from java.lang.Number?

- ☒ a. AtomicFloat ❌
- ☐ b. AtomicDouble
- ☐ c. AtomicBoolean
- ☐ d. AtomicInteger

The correct answer is: AtomicInteger

**Question 36**

Incorrect

Mark 0.00 out of 1.00

Given this code segment:

```
DateTimeFormatter fromDateFormat = DateTimeFormatter.ofPattern("MM/dd/yyyy");  
// PARSE_DATE  
DateTimeFormatter toDateFormat = DateTimeFormatter.ofPattern("dd/MMM/YY");  
System.out.println(firstOct2015.format(toDateFormat));
```

Which one of the following statements when replaced with the comment PARSE\_DATE will result in the code to print "10/Jan/15"?

- ☒ a. `LocalTime firstOct2015 = LocalTime.parse("01/10/2015",fromDateFormat);` ✖
- ☐ b. `Period firstOct2015 = Period.parse("01/10/2015", fromDateFormat);`
- ☐ c. `DateTimeFormatter firstOct2015 = DateTimeFormatter.parse("01/10/2015", fromDateFormat);`
- ☐ d. `LocalDate firstOct2015 = LocalDate.parse("01/10/2015", fromDateFormat);`

Your answer is incorrect.

The correct answer is:

`LocalDate firstOct2015 = LocalDate.parse("01/10/2015", fromDateFormat);`

**Question 37**

Incorrect

Mark 0.00 out of 1.00

What will be the result of executing this code segment?

```
Stream.of("ace ", "jack ", "queen ", "king ", "joker ").mapToInt(card -> card.length()).filter(len -> len > 3).peek(System.out::print).limit(2);
```

- ☒ a. This code segment prints: jack queen ✖
- ☐ b. This code segment prints: king joker
- ☐ c. This code segment prints: jack queen king joker
- ☐ d. This code segment does not print anything on the console

Your answer is incorrect.

The correct answer is:

This code segment does not print anything on the console

**Question 38**

Incorrect

Mark 0.00 out of 1.00

Choose the correct option based on this program:

```
class base1 {  
    protected int var;  
}  
interface base2 {  
    int var = 0; // #1  
}  
class Test extends base1 implements base2 {  
    // #2 public static void main(String args[]) {  
        System.out.println("var:" + var); // #3  
    }  
}
```

- ☒ a. The program will report a compilation error at statement marked with the comment #1 ❌
- ☐ b. The program will report a compilation error at statement marked with the comment #2
- ☐ c. The program will report a compilation error at statement marked with the comment #3
- ☐ d. The program will compile without any errors

Your answer is incorrect.

The correct answer is:

The program will report a compilation error at statement marked with the comment #3

**Question 39**

Incorrect

Mark 0.00 out of 1.00

Consider the following program and choose the right option from the given list:

```
class Base {  
    public void test() {  
        protected int a = 10; // #1  
    }  
}  
class Test extends Base { // #2  
    public static void main(String[] args) { System.out.printf(null); // #3  
    }  
}
```

- ☒ a. The compiler will report errors at statement marked with the comment #3 ✖
- ☐ b. The compiler will report an error at statement marked with the comment #2
- ☐ c. The compiler will report an error at statement marked with the comment #1
- ☐ d. The program will compile without any error

Your answer is incorrect.

The correct answer is:

The compiler will report an error at statement marked with the comment #1

**Question 40**

Incorrect

Mark 0.00 out of 1.00

Which of the following is NOT a problem associated with thread synchronization using mutexes?

- ☒ a. Lock starvation ✖
- ☐ b. Livelock
- ☐ c. Deadlock
- ☐ d. Type erasure

The correct answer is: Type erasure