Preguntas tipo examen Programador Java 11 Certificado 1Z0-819

Pregunta 1

Consider the following code appearing in a file named TestClass.java:

```
class Test{ }  // 1
public class TestClass {
  var v1; // 2
  public int main(String[] args)  { // 3
     var v2; //4
     double x=10, double y;  // 5
     System.out.println[]; // 6
     for(var k=0; k<x; k++){ } //7
     return 0;
  }
}
```

Which of the lines are valid?(choose 3)

}

A. //1.
B. //2.
C. //3.
D. //4.
E. //5.
F. //6.
G. //7

Pregunta 2

What will the following code print ?

```
class OperTest{
  public static void main(String[] args){
    int a = 5;
    int b = 6;
    a += (a = 3);
    b = b + (b =2);
    System.out.println(a+ ",  "+b);
  }
}
```

A. 3, 4
B. 0, 0
C. 5, 6
D. 8, 8

Pregunta 3

Which of the following declarations are valid? (choose 4)

A. float f1 = 1.0;
B. float f = 43e1;
C. float f = -1;
D. float f = 0x0123;
E. float f=10;
F. var fx=1.0;float fy=fx;
G. var f=6f;

Pregunta 4

Which of the following statements will evaluate to true?

A. "String".replace('g','G') == "String".replace('g','G')
B. "String".replace('g','g') == new String("String").replace('g','g')
C. "String".replace('g','G')=="StrinG"
D. "String".replace('g','g')=="String"
E. None of these.

Pregunta 5

Consider the following code:

```
class Outsider
{
  public class Insider{ }
}
public class TestClass
{
  public static void main(String[] args)
  {
     var os = new Outsider();
     // 1 insert line here
   }
}
```

Which of the following options can be inserted at //1?

A. Insider in = os.new Insider();
B. Outsider.Insider in = os.new Insider();
C. Insider in = Outsider.new Insider();
D. os.Insider in = os.new Insider();

Pregunta 6

Assuming that the following code compiles without any error, identify correct statements (choose 2).

```
interface Processor {
  A process(String str);
}
class ItemProcessor implements Processor{
  @Override
  public B process(String str){
    return new B(str);
  }
}
```

A. B must be a sub type of A.
B. A must be a sub type of B.
C. B must be final.
D. A cannot be abstract.
E. B cannot be abstract

Pregunta 7

Given:

```
class A{
  public List<Number> getList(){
     //valid code
  };
}
class B extends A{
  @Override
  *INSERT CODE HERE*
     //valid code
  };
}
```

What can be inserted in the above code?

A. public List<? extends Integer> getList(){
B. public List<? super Integer> getList(){
C. public ArrayList<? extends Number> getList(){
D. public ArrayList<? super Number> getList(){
E. public ArrayList<Number> getList(){

Pregunta 8

Consider the following code:

```
public class TestClass{
  public void method(Object o){
    System.out.println("Object Version");
  }
  public void method(ClaseB s){
    System.out.println("ClaseB Version");
  }
  public void method(ClaseA s){
    System.out.println("ClaseA Version");
  }
  public static void main(String args[]){
    TestClass tc = new TestClass();
    tc.method(null);
  }
}
```

What would be the output when the above program is compiled and run? (Assume that ClaseB is a subclass of ClaseA)

A. It will print Object Version
B. It will print ClaseA Version
C. It will print ClaseB Version
D. It will not compile.
E. It will throw an exception at runtime

Pregunta 9

Given the following definitions and reference declarations:

```
interface I1 { }

interface I2 { }

class C1 implements I1 { }

class C2 implements I2 { }

class C3 extends C1 implements I2 { }

C1 o1;

C2 o2;

C3 o3;
```

Which of these statements are legal? (choose 3)

A. class C4 extends C3 implements I1, I2 { }
B. o3 = o1;
C. o3 = o2;
D. I1 i1 = o3; I2 i2 = (I2) i1;
E. I1 b = o3;

Pregunta 10

This following code appears in a file named VehicleType.java. Why would it not compile?

```
//In file VehicleType

package objective1;

public enum VehicleType

{

   SUV, SEDAN, VAN, SPORTSCAR;

   public VehicleType()

   {   }

}
```

A. VehicleType's definition cannot be public.
B. VehicleType's constructor cannot be public.
C. package statement is invalid for VehicleType.
D. VehicleType must be defined as a class instead of enum since it is the only definition in the file.

Pregunta 11

What will the following code print when compiled and run?

```
class X{
   public X(){
      System.out.print("In X");
   }
}
class Y extends X{
   public Y(){
      super();
      System.out.print("In Y");
   }
}
class Z extends Y{
   public Z(){
      System.out.print("In Z");
   }
}
public class Test {
   public static void main(String[] args) {
      Y y = new Z();
   }
}
```

A. It will not compile.
B. In X In Y In Z
C. In Z In Y In X
D. In Y In X In Z
E. In Z In X In Y

Pregunta 12

Given:

```
public class MyTest{

        public static void main(String[] args){

                System.out.println(args[1]+":"+args[3]+":"+args[2]);

        }

}
```

Which is the output when execute the following command?:

java MyTest print name my

A. print my name
B. print name my
C. name null my
D. It will throw an exception
E. Compilation fails

Pregunta 13

Given:

```
interface Oper{
        public int calc(int a, int b);
}
public class Test{
        public static void main(String[] args) {
                int result=0;
                //line 1
                result=obj.calc(3,8);
                System.out.println(result);
        }
}
```

Which two codes can be inserted in line 1, independently, to compile?

A. Oper obj=new Oper();
B. Oper obj=()->a+b;
C. Oper obj=(a,b)->a*b;
D. Oper obj=return a*b;
E. Oper obj=(int a, int b)->{return a-b;}

Pregunta 14

```
package b;

public class Person() {

        protected Person() {   //line 1

        }

}

package a;

import b.Person;

public class Test {  //line 2

        public static void main(String[] args) {

                Person person=new Person();   //line 3

        }

}
```

The program doesn't compile. Which two independent actions resolve the problem? (choose two)

A. In line 1, change the access modifier to private
B. In line 1, change the access modifier to public
C. In line 2, add extends Person to the Test class an in line 3 change de creation object to Person person=new Test();
D. In line 2, change access modifier to protected
E. In line 1, remove the access modifier

Pregunta 15

Given:

```
public class Main{
        public static void main(String[] args){
                Consumer consumer=msg->System.out::print; //line1
                consumer.accept("hello functional!");
        }
}
```

This code results in a compilation error. Which code should be inserted on line 1 for a successful compilation?

A. Consumer consumer=msg->{return System.out.print(msg);};
B. Consumer consumer=var msg->System.out.print(msg);
C. Consumer consumer=(String msg)->System.out::print(msg);
D. Consumer consumer= System.out::print;

Pregunta 16

```
public class Test {
	public static void main(String[] args) {
		for(int i=0;i<args.length;i++) {
			System.out.println(i+")."+args[i]);
			switch(args[i]) {
				case "one":
					continue;
				case "two":
					i--;
					continue;
				default:
					break;
			}
		}
	}
}
```

executed with this command:

java Test one two three

Which is the result?

A. 0).one
B. 0).one1).two
C. 0).one1).two2).Three
D. It creates an infinite loop printing 0).one1)two1)two..
E. A java.lang.NullPointerException is thrown

Pregunta 17

Which two interfaces can be used in lambda expressions?

A.
```
interface I1{
        void print();
        default void print(int a){}
    }
```

B.
```
interface I2{
        String toString(String cad);
        boolean test(int a, int b);
    }
```

C.
```
interface I3{
        default void comment();
    }
```

D.
```
interface I4{
        int send();
        boolean equals(Object ob);
    }
```

E.
```
interface I5{
        static void print();
        int get(int a);
    }
```

Pregunta 18

Given:

```
List<Integer> nums=List.of(5,19,3,4,12,4,11,22,15,7);

        System.out.println(nums.stream()

                .mapToInt(n->n-4)

                .distinct()

                .filter(n->n>20)

                .findFirst()

                .getAsInt());
```

Which is the result?

A. It prints 0
B. It prints 20
C. It prints 22
D. It prints nothing without error
E. Exception is thrown

Pregunta 19

What will the following code print when run?

```
import java.nio.file.Path;
import java.nio.file.Paths;
public class PathTest {
   static Path p1 = Paths.get("c:\\level1\\psing\\Main.java");
   public static String getData(){
      String data = p1.getName(0).toString();
      return data;
   }
   public static void main(String[] args) {
      System.out.println(getData());
   }
}
```

A. IllegalArgumentException
B. ArrayIndexOutOfBoundsException
C. c:\
D. c:
E. level1

Pregunta 20

Given that the file test.txt is accessible and contains multiple lines, which of the following code fragments will correctly print all the lines from the file?

A. Stream<String> lines = Files.find(Paths.get("test.txt"));
   lines.forEach(System.out::println);
B. BufferedReader bfr = new BufferedReader(new FileReader("test.txt"));
   System.out.println(bfr.readLines());
C. Stream<String> lines = Files.list(Paths.get("test.txt"));
   lines.forEach(x->System.out.println(x));
D. Stream<String> lines = Files.lines(Paths.get("test.txt"));
   lines.forEach(System.out::println);
E. List<String> lines = Files.readAllLines(Paths.get("test.txt"));
   lines.forEach(s -> System.out.println(s));

Pregunta 21

Consider the following code:

```
public static boolean isValid(Path p){
    return p.startsWith("temp") && p.endsWith("geo.dat");
}
public static void print() {
    var p1 = Paths.get("\\temp\\datas");
    var p2 = p1.resolve("geo.dat");
    System.out.println(p2+" "+isValid(p2));
}
```

What will be printed when the method print() is executed?

A. \temp\datas\clients false
B. temp\datas\geo.dat false
C. \temp\datas\geo.dat false
D. temp\datas\geo.dat true
E. geo.dat false
F. \geo.dat false

Pregunta 22

Given:

```
String qr = INSERT CODE HERE
try(PreparedStatement ps =  connection.prepareStatement(qr);){
        ...
}
```

What can be inserted in the above code? (choose 2)

A. "insert into USERINFO values(?, ?, ?, ?)"; (Assuming USERINFO table with four columns exists.)
B. "update USERINFO set NAME=?1 where ID=?2"; (Assuming USERINFO table with NAME and ID columns exists.)
C. "delete USERINFO from ID=2"; (Assuming USERINFO table with ID column exists.)
D. "select * from USERINFO where ID=2"; (Assuming USERINFO table with ID column exists.)

Pregunta 23

Which of the following are valid JDBC URLs? (choose 2)

A. jdbc:mysql://localhost:3306/sample
B. jdbc://oracle.com/sample
C. mysql://jdbc.mysql/sample
D. jdbc:oracle:thin:@localhost:1521:testdb
E. http://192.168.1.10:3306/mysql/sampledb

Pregunta 24

Assuming the Product class has a getPrice method, this code does not compile:

```
List products=List.of(new Product("play station",234.5),
                      new Product("mobile",190.2),
                      new Product("smart watch",98.7)); //line 1
Stream pst=products.stream(); //line 2
pst.filter(p->p.getPrice()>100.00)  //line 3
        .forEach(Sustem.out::println);
```

Which two statements, independently, would allow this code to compile? (Choose two.)

A. Replace line 3with pst.filter(a −> ((Product)a).getPrice() > 100.00)

B. Replace line 1 with List<Product> pst = products.stream();

C. Replace line 3 with pst.filter((Product a) −> a.getPrice() > 100.00)

D. Replace line 2 with Stream<Product> pst = products.stream();

Pregunta 25

Given:

```
var nums = List.of(1, 2, 3, 4, 5, 6, 7).stream();

Predicate<Integer> p = //a predicate goes here

Optional<Integer> value = nums.filter(p).reduce((a, b)->a+b);

value.ifPresent(System.out::println);
```

Select two options:

A. setting p to a->a<0; will produce no output.
B. setting p to a->a<0; will generate a NullPointerException.
C. setting p to a->a<0; will generate a NoSuchElementException.
D. setting p to a->a%2==0; will produce 12.
E. setting p to a->a%2==0; will produce 16.

Pregunta 26

Given:

```
List<String> strList = Arrays.asList("a", "aa", "aaa");

Function<String, Integer> f = x->x.length();

Consumer<Integer> c = x->System.out.print("Len:"+x+" ");

Predicate<String> p = x->"".equals(x);

strList.forEach(  *INSERT CODE HERE*  );
```

What can be inserted in the code above?

A. f
B. c
C. p
D. c and p
E. None of the above.

Pregunta 27

You have been given an instance of an Executor and you use that instance to execute tasks. How many threads will be created for executing these tasks by the Executor?

A. Exactly 1.
B. One thread for each task that is submitted to the Executor.
C. As many as there are cores in the CPU.
D. Number of threads created by the Executor depends on how the Executor instance was created.
E. Number of threads is automatically determined based on the load on the Executor instance.

Pregunta 28

Consider the following code appearing in a module-info.java

```
module com.members{
  requires transitive org.mytype;
}
```

Identify correct statements.

A. Any module that requires the com.members module must also require the org.mytype module.
B. Any module that requires the com.members module can use the org.mytype module without requiring it.
C. Only a module that requires the com.members module can use the org.mytype module.
D. Any module that requires the org.mytype module must also require the com.members module.
E. Any module that requires the com.members module must require the org.mytype module instead of com.members.

Pregunta 29

You are creating a xyz.data module that makes its two classes - com. xyz.data.Part1 and com.xyz.data.Part2 - available to all other modules for use.

Which of the following files correctly defines this module?

A. module xyz.data { exports com.xyz.data.*; }
B. module xyz.data { exports com.xyz.data; }
C. module xyz.data { exports com.xyz.data to all; }
D. module xyz.data { exports com.xyz.data.Part1, com. xyz.data.Part2; }
E. module xyz.data { exports com.xyz.data.Part1; exports com. xyz.data.Part2; }

Pregunta 30

Given:

```
var data = new ArrayList<>();

data.add("Landing");

data.add(30);

data.add("Page");

data.set(1, 25);

data.remove(2);

data.set(2, 200L);

System.out.print(data);
```

What is the output?

A. [Page, 200]

B. [Landing, 30, Page]

C. [Landing, 25, null, 200]

D. An exception is thrown at run time

Pregunta 31

Which code fragment prints 100 random numbers?

A. var r=new Random();
   DoubleStream.generate(r::nextDouble).limit(100).forEach(System.out::println);
B. DoubleStream.generate(Random::nextDouble).limit(100).forEach(System.out::println);
C. DoubleStream.generate(Random::nextDouble).skip(100).forEach(System.out::println);
D. DoubleStream.stream(Random::nextDouble).limit(100).forEach(System.out::println);

Pregunta 32

Given:

```
public class Painter{
        public Painter(){
        }
        //Painter methods
}
```

You want to use the Painter class in a try-with-resources statement.

Which change will accomplish this?

A. Extend AutoCloseable and override the close method.

B. Implement AutoCloseable and override the autoClose method.

C. Extend AutoCloseable and override the autoClose method.

D. Implement AutoCloseable and override the close method.

Pregunta 33

Which is a correct implementation of a BinaryOperator functional interface?

A. (a,b)->System.out.println(a+":"+b)
B. a,b->a+b
C. (a,b)-> String.toString(a,b)
D. (var a,b)->a.compareTo(b)
E. (a,b)->a.concat(b)

Pregunta 34

Given:

```
@Retention(RetentionPolicy.RUNTIME)
public @interface Logging {
   String value() default "";
   String[] params();
   String date();
   int depth() default 10;
}
```

Which of the following options correctly uses the above annotation?

A. @ Logging (date = "2020-04-17", params = { null })
   void process (int index){ }
B. @ Logging (date = "2019", params = "index")
   void process(int index){ }
C. @ Logging (depth = 10, date = "04/10/2005", params = {"index"}, value=" pr ")
   static final String cad = null;
D. @ Logging ({"index"}, "23/01/2022")
   void process (int index){ }
E. @ Logging ("value", params={"index"}, date="30/05/2019")
   void process (int index){ }

Pregunta 35

Consider the following code:

```
import java.util.*;

import java.text.*;

public class TestClass{

   public static void main(String[] args) throws Exception    {

      double amount = 100600.5;

      Locale jp = new Locale("jp", "JP");

      //1 create formatter here.

      System.out.println(  formatter.format(amount)  );

   }

}
```

How will you create formatter using a factory at //1 so that the output is in Japanese Currency format?

A. NumberFormat formatter = NumberFormat.getCurrencyFormatter(jp);
B. NumberFormat formatter = new DecimalFormat(jp);
C. NumberFormat formatter = NumberFormat.getCurrencyInstance(jp);
D. NumberFormat formatter = NumberFormat.getInstance(jp);
E. NumberFormat formatter = new DecimalFormat("#.00");

Pregunta 36

Given:

```
public class Employ{
        private Map<String, Double> info=new HashMap<>();
        private Lock lock=new ReentrantLock();
        public void setData(String name, Double salary){
                //Line 1
                try{
                        info.put(name,salary);
                }finally{
                        //Line 2
                }
        }

}
```

What should be inserted at line 1 and line 2?

A. lock.adquired(); and lock.release();
B. lock.lock(); and lock.unlock();
C. lock.lock().adquire(); and lock.lock().release();
D. lock.readLock(); and lock.writeLock();

Pregunta 37

Given

```
public class Base{
        public <T> Collection<T> mybase(Collection<T> args){...}
}
```

and

```
public class Child extends Base{...}
```

Which two statements are true if the method is added to Child?(choose two)

A. public Collection<String> mybase(Collection<String> arg) { ... } overrides Base.mybase.

B. public <T> Collection<T> mybase(Stream<T> arg) { ... } overloads Base.mybase.

C. public <T> List<T> mybase(Collection<T> arg) { ... } overrides Base.mybase.

D. public <T> Collection<T> mybase(Collection<T> arg) { ... } overloads Base.mybase.

E. public <T> Collection<T> mychild(Collection<T> arg) { ... } overloads Base.mybase.

F. public <T> Iterable<T> mybase(Collection<T> arg) { ... } overrides Base.mybase.

Pregunta 38

Given

```
int[] secA={2,4,6,8,10};

int[] secB={2,4,8,6,10};

int res1=Arrays.mismatch(secA, secB);

int res2=Arrays.compare(secA, secB);

System.out.print(res1+" : "+res2);
```

What is the result?

A. -1:2
B. 2:-1
C. 2:3
D. 3:0

Pregunta 39

Given:

List<Integer> nums=List.of(34, 56,19,80,25,100);

System.out.println(/*Insert code here*/);

Which of the following options will correctly print then numbers of elements that are greater than 50?

A. nums.toStream().reduce(n->n>50).length()
B. nums.stream().map(n->n>50).count()
C. nums.asStream().filter(n->n>50).forEach()
D. nums.stream(n->n>50).size()
E. nums.stream().filter(n->n>50).count()

Pregunta 40

Given:

```
public class Person{
        private String name;
        private String street;
        private int age;
        public Person(String n, String s, int a){
                name=n;street=s;age=a;
        }
        //only getters
}
```

Which of the following actions implements the Java SE Secure guidelines to achieve this class to be inmutable?

A. Make the class final
B. Create private setters methods
C. Make the fields final
D. Make getter methods synchronized