

1. What will be the output of the following Java program?

```
class output
{
    public static void main(String args[])
    {
        StringBuffer c = new StringBuffer("Hello");
        c.delete(0,2);
        System.out.println(c);
    }
}
```

Answers

1. He
2. Hel
3. lo
- 4. llo**

2. Which component is responsible to optimize bytecode to machine code?

Answers

1. JVM
2. JDK
- 3. JIT**
4. JRE

3. **class Base extends Exception {}**

class Derived extends Base {}

```
public class Main {
    public static void main(String args[]) {
        // some other stuff
        try {
            // Some monitored code
            throw new Derived();
        }
        catch(Base b) {
            System.out.println("Caught base class exception");
        }
        catch(Derived d) {
            System.out.println("Caught derived class exception");
        }
    }
}
```

Answers

1. Caught base class exception
2. Caught derived class exception
3. Compiler Error because derived is not throwable
- 4. Compiler Error because base class exception is caught before derived class**

4. What happens if you call deleteRow() on a ResultSet object?

Answers

1. The row you are positioned on is deleted from the ResultSet, but not from the database

2. The row you are positioned on is deleted from the ResultSet and from the database

3. The result depends on whether the property synchronizeWithDataSource is set to true or false

4. You will get a compile error: the method does not exist because you cannot delete rows from a ResultSet

5. The built-in base class in Java, which is used to handle all exceptions is

Answers

1. Raise

2. Exception

3. Error

4. Throwable

6. What will be the output of the following Java code?

```
class output
{
    public static void main(String args[])
    {
        StringBuffer sb=new StringBuffer("Hello");
        sb.replace(1,3,"Java");
        System.out.println(sb);
    }
}
```

Answers

1. Hello java

2. Hellojava

3. HJavallo

4. Hjava

7. What is the difference between TYPE_SCROLL_INSENSITIVE, and TYPE_SCROLL_SENSITIVE?

Answers

1. Both types of result sets will make changes visible if they are closed and then reopened.

2. A result set that is TYPE_SCROLL_INSENSITIVE does not reflect changes made while it is still open and one that is TYPE_SCROLL_SENSITIVE does.

3. You will get a scrollable ResultSet object if you specify one of these ResultSet constants.

4. A result set that is TYPE_SCROLL_INSENSITIVE makes the result set read only while one that is TYPE_SCROLL_SENSITIVE does not.

8. Which of the following is correct about CallableStatement?

Answers

1. Used when you want to access the database stored procedures.
2. The CallableStatement interface can accept runtime input parameters.
3. **Both of the above.**
4. None of the above.

9. Which of the following describes the correct sequence of the steps involved in making a connection with a database.

1. Loading the driver
2. Process the results.
3. Making the connection with the database.
4. Executing the SQL statements.

Answers

1. 1,2,3,4
2. **1,3,4,2**
3. 2,1,3,4
4. 4,1,2,3

10. Which one is the correct syntax for creating a Statement?

Answers

1. Statement stmt = connection.createStatements();
2. Statement stmt = connection.preparedStatement();
3. **Statement stmt = connection.createStatement();**
4. none of these

11. Which package we need to import to work with JDBC?

Answers

1. **import java.sql.* ;**
2. import javax.sql.* ;
3. import java.jdbc.sql.* ;
4. import java.jdbc.* ;

12. Which statement is correct?

Answers

1. `ResultSet rs = stmt.selectQuery("SELECT COF_NAME, PRICE FROM COFFEES");`
2. `ResultSet rs = stmt.executeSelect("SELECT COF_NAME, PRICE FROM COFFEES");`
3. `ResultSet rs = stmt.runQuery("SELECT COF_NAME, PRICE FROM COFFEES");`
4. **`ResultSet rs = stmt.executeQuery("SELECT COF_NAME, PRICE FROM COFFEES");`**

13. The return type of `execute(String query)` is?

Answers

1. `int`
2. `ResultSet`
3. **`boolean`**
4. `void`

14. What gets printed when the following code is compiled and run with the following command -

`java test 2` Select the one correct answer.

```
public class test {
    public static void main(String args[]) {
        Integer intObj=Integer.valueOf(args[args.length-1]);
        int i = intObj.intValue();

        if(args.length > 1)
            System.out.println(i);
        if(args.length > 0)
            System.out.println(i - 1);
        else
            System.out.println(i - 2);
    }
}
```

Answers

1. `test`
2. `test -1`
3. `0`
4. **`1`**

15. What gets printed when the following program is compiled and run? Select the one correct answer.

```
class test {
    public static void main(String args[]) {
        int i;
        do {
            i++;
        }
        while(i < 0);
        System.out.println(i);
    }
}
```

Answers

1. The program does not compile as i is not initialized.

2. The program compiles but does not run.

3. The program compiles and runs but does not print anything.

4. The program prints 0.

16. Which of the following is/are true about packages in Java?

1) Every class is part of some package.

2) All classes in a file are part of the same package.

3) If no package is specified, the classes in the file go into a special unnamed package

4) If no package is specified, a new package is created with folder name of class and the class is put in this package.

Answers

1. Only 1, 2 and 3

2. Only 1, 2 and 4

3. Only 4

4. Only 1 and 3

17. What will be the output of the following Java program?

```
interface calculate
{
    void cal(int item);
}
class display implements calculate
{
    int x;
    public void cal(int item)
    {
        x = item * item;
    }
}
class interfaces
{
    public static void main(String args[])
    {
        display arr = new display();
        arr.x = 0;
        arr.cal(2);
        System.out.print(arr.x);
    }
}
```

Answers

1. 0

2. 2

3. 4

4. None of the mentioned

18. What will be the output of the following Java program?

```
import java.lang.reflect.*;
class Additional_packages
{
    public static void main(String args[])
    {
        try
        {
            Class c = Class.forName("java.awt.Dimension");
            Constructor constructors[] = c.getConstructors();
            for (int i = 0; i < constructors.length; i++)
                System.out.println(constructors[i]);
        }
        catch (Exception e)
        {
            System.out.print("Exception");
        }
    }
}
```

Answers

1. Program prints all the constructors of 'java.awt.Dimension' package

2. Program prints all the possible constructors of class 'Class'

3. Program prints "Exception"

4. Runtime Error

19. find errors if any otherwise write output:

```
class Ex
{
    Public static void main(String args[])
    {
        Date d=new date();
        System.out.println("date is:"+d);
    }
}
```

Answers

1. it will print the whole current date and time

2. it will print the current date

3. error:date class and constructor not found

4. error:can not print object d

20. What is the return type of the hashCode() method in the Object class?

Answers

1. Object

2. int

3. long

4. void

21. Which of the following is true about the anonymous inner class?

Answers

1. It has only methods

2. Objects can't be created

3. It has a fixed class name

4. It has no class name

22. Which option is false about the final keyword?

Answers

1. A final method cannot be overridden in its subclasses.

2. A final class cannot be extended.

3. A final class cannot extend other classes.

4. A final method can be inherited.

23. What is the result of the following program?

```
public static synchronized void main(String[] args) throws  
InterruptedException {  
    Thread f = new Thread();  
    f.start();  
    System.out.print("A");  
    f.wait(1000);  
    System.out.print("B");  
}
```

Answers

1. It prints A and B with a 1000 seconds delay between them

2. It only prints A and exits

3. It only prints B and exits

4. A will be printed, and then an exception is thrown.

24. What do you mean by chained exceptions in Java?

Answers

1. Exceptions occurred by the VirtualMachineError

2. An exception caused by other exceptions

3. Exceptions occur in chains with discarding the debugging information

4. None of the above

25. Which of these is an correct way making a list that is upper bounded by class Number?

Answers

1. `List<? extends Number>`
2. `List<extends ? Number>`
3. `List(? extends Number)`
4. `List(? UpperBounds Number)`

26. Which of the following is a valid syntax to synchronize the HashMap?

Answers

1. `Map m = hashMap.synchronizeMap();`
2. `HashMap map =hashMap.synchronizeMap();`
3. **`Map m1 = Collections.synchronizedMap(hashMap);`**
4. `Map m2 = Collection.synchronizeMap(hashMap);`

27. What is the Output of following Java Program?

```
import java.util.ArrayList;

class Demo {
    public void show()
    {
        ArrayList<String> list = new ArrayList<String>();
        list.add("Sunbeam"); // line 6
        list.add("Pune");
        System.out.print(list.getFirst()); // line 8
    }
} public class Main {
    public static void main(String[] args)
    {
        Demo demo = new Demo();
        demo.show();
    }
}
```

Answers

1. Sunbeam
2. **Compilation Error**
3. Runtime Error
4. Pune

28. What is the output of this question?

```
class Test2 {
    public
        static void main(String[] args)
        {
            String str[] = { "Sunbeam", "Infotech", "Pune" };
        }
}
```



```

        System.out.println(str.length);
        System.out.println(str[0].length);
    }
}

```

Answers

1. Error

2. 3
7

3. 3
19

4. None

29. Which of the following declarations are invalid?

```

class Test3 {
public
    static void main(String[] args)
    {
        int[][] arr1 = new int[2][3]; // Line 1
        int[][] arr2 = new int[2][]; // line 2
        int[][] arr3 = new int[][]; // line 3
        int[][] arr4 = new int[][2]; // line 4
    }
}

```

Answers

1. All

2. line 1, 3, 4

3. line 3, 4

4. line 2, 3, 4

30. What is the output of the following program?

```

import java.util.*;

public class priorityQueue
{
    public static void main(String[] args)
    {
        PriorityQueue<Integer> queue =
            new PriorityQueue<>();

        queue.add(11);
        queue.add(10);
        queue.add(22);
        queue.add(5);
        queue.add(12);
        queue.add(2);

        while (queue.isEmpty() == false)
            System.out.printf("%d ", queue.remove());

        System.out.println("\n");
    }
}

```

```
    }  
}
```

Answers

1. 11 10 22 5 12 2

2. 2 12 5 22 10 11

3. 2 5 10 11 12 22

4. 22 12 11 10 5 2

31. What will be the output of the program?

```
public class Test  
{  
    private static int[] x;  
    public static void main(String[] args)  
    {  
        System.out.println(x[0]);  
    }  
}
```

Answers

1. 0

2. null

3. Compile Error

4. NullPointerException at runtime

32. What will be the output of the program?

```
public class Test  
{  
    private static float[] f = new float[2];  
    public static void main (String[] args)  
    {  
        System.out.println("f[0] = " + f[0]);  
    }  
}
```

Answers

1. f[0] = 0

2. f[0] = 0.0

3. Compile Error

4. Runtime Exception

33. What will be the output of the program?

```
import java.util.*;
class H
{
    public static void main (String[] args)
    {
        Object x = new Vector().elements();
        System.out.print((x instanceof Enumeration)+"");
        System.out.print((x instanceof Iterator)+"");
        System.out.print(x instanceof ListIterator);
    }
}
```

Answers

1. Prints: false,false,false
2. Prints: false,false,true
3. Prints: false,true,false
- 4. Prints: true,false,false**

34. What will be the output of the program?

```
public class X
{
    public static void main(String [] args)
    {
        try
        {
            badMethod();
            System.out.print("A");
        }
        catch (RuntimeException ex) /* Line 10 */
        {
            System.out.print("B");
        }
        catch (Exception ex1)
        {
            System.out.print("C");
        }
        finally
        {
            System.out.print("D");
        }
        System.out.print("E");
    }
    public static void badMethod()
    {
        throw new RuntimeException();
    }
}
```

Answers

1. BD
2. BCD

3. BDE

4. BCDE

35. What will be the output of the program?

```
public class TestObj
{
    public static void main (String [] args)
    {
        Object o = new Object() /* Line 5 */
        {
            public boolean equals(Object obj)
            {
                return true;
            }
        } /* Line 11 */

        System.out.println(o.equals("Fred"));
    }
}
```

Answers

1. It prints "true".
2. It prints "Fred".
3. An exception occurs at runtime.

4. Compilation fails

36. What two statements are true about the result obtained from calling Math.random()?

1. The result is less than 0.0.
2. The result is greater than or equal to 0.0..
3. The result is less than 1.0.
4. The result is greater than 1.0.
5. The result is greater than or equal to 1.0.

Answers

1. 1 and 2

2. 2 and 3

3. 3 and 4

4. 4 and 5

37. void start() {

```
    A a = new A();
    B b = new B();
    a.s(b);
    b = null; /* Line 5 */
    a = null; /* Line 6 */
    System.out.println("start completed"); /* Line 7 */
}
```

When is the B object, created in line 3, eligible for garbage collection?

Answers

1. after line 5
2. after line 6
3. after line 7
4. There is no way to be absolutely certain.

38. What will be the output of the following Java program?

```
class X
{
    int a;
    double b;
}
class Y extends X
{
    int c;
}
class Output
{
    public static void main(String args[])
    {
        X a = new X();
        Y b = new Y();
        Class obj;
        obj = b.getClass();
        System.out.print(obj.getSuperclass());
    }
}
```

Answers

1. X
2. Y
3. class X
4. class Y

39. Which collection class allows you to access its elements by associating a key with an element's value, and provides synchronization?

Answers

1. java.util.SortedMap
2. java.util.TreeMap
3. java.util.TreeSet
4. java.util.Hashtable

40. What will be the output of the following Java code?

```

class A
{
    int i;
    void display()
    {
        System.out.println(i);
    }
}
class B extends A
{
    int j;
    void display()
    {
        System.out.println(j);
    }
}
class method_overriding
{
    public static void main(String args[])
    {
        B obj = new B();
        obj.i=1;
        obj.j=2;
        obj.display();
    }
}

```

Answers

1. 0
2. 1
- 3. 2**
4. Compilation Error