

1. What is the result of compiling and executing the following application?

```
package mind;  
public class Remember {  
    public static void think() throws Exception { // k1  
        try {  
            throw new Exception();  
        }  
    }  
    public static void main(String... ideas) throws Exception {  
        think();  
    }  
}
```

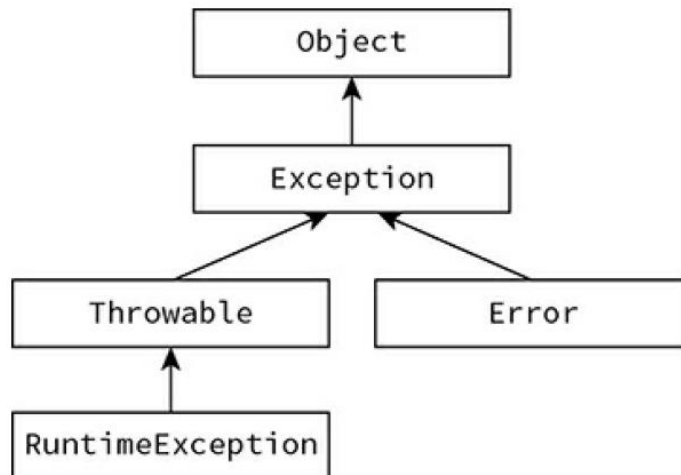
- A. The code compiles and runs without printing anything.
- B. The code compiles but a stack trace is printed at runtime.
- C. The code does not compile because of line k1.
- D. The code does not compile for another reason.

2. Choose the answer that lists the keywords in the order that they would be used together.

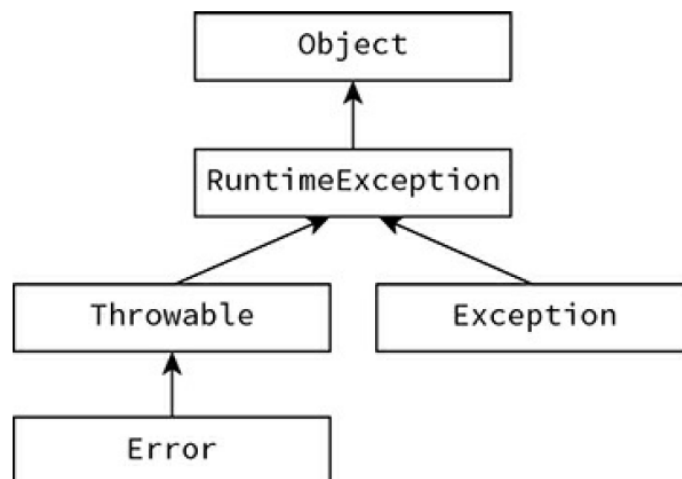
- A. catch, try, finally
- B. try, catch, finally
- C. finally, catch, try
- D. try, finally, catch

3. Which of the following diagrams of java.lang classes shows the inheritance model properly?

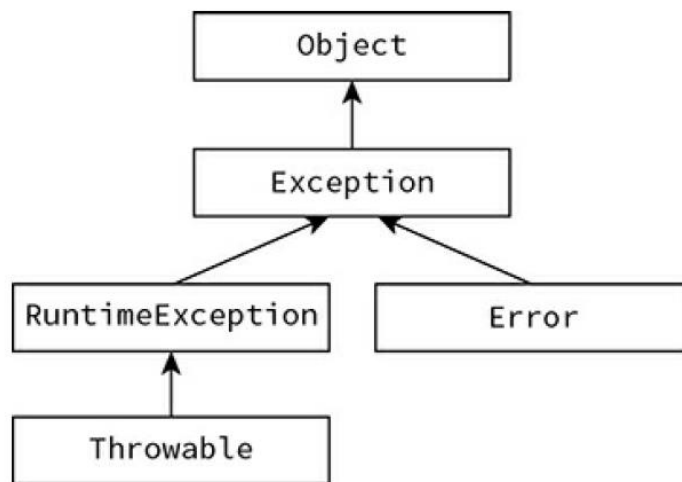
A.



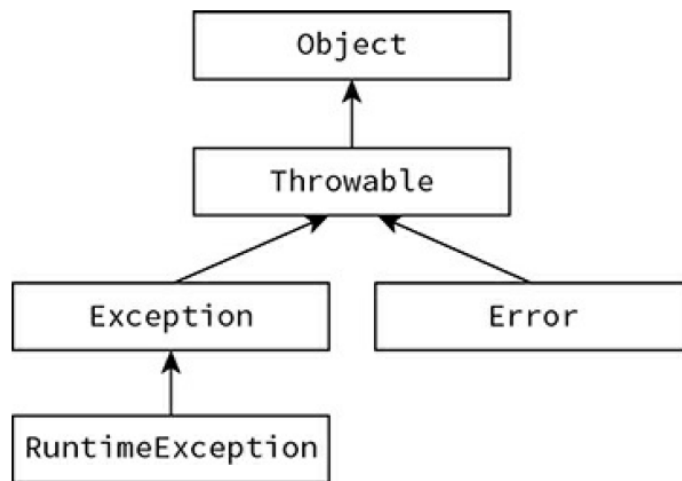
B.



C.



D.



4. Which of the following Throwable types is it recommended not to catch in a Java application?

- A. Error
- B. CheckedException
- C. Exception
- D. RuntimeException

5. What is the output of the following application?

```
package game;

public class Baseball {
    public static void main(String... teams) {
        try {
            int score = 1;
            System.out.print(score++);
        } catch (Throwable t) {
            System.out.print(score++);
        } finally {
            System.out.print(score++);
        }
        System.out.print(score++);
    }
}
```

- A. 123
- B. 124
- C. 12
- D. None of the above

6. Which of the following is a checked exception?

- A. `ClassCastException`
- B. `IOException`
- C. `ArrayIndexOutOfBoundsException`
- D. `IllegalArgumentException`

7. Fill in the blanks: The \_\_\_\_\_ keyword is used in method declarations, while the \_\_\_\_\_ keyword is used to throw an exception to the surrounding process.

- A. throws, throw
- B. catch, throw
- C. throw, throws
- D. throws, catch



8. If a try statement has catch blocks for both Exception and IOException, then which of the following statements is correct?

- A. The catch block for Exception must appear before the catch block for IOException.
- B. The catch block for IOException must appear before the catch block for Exception.
- C. The catch blocks for these two exception types can be declared in any order.
- D. A try statement cannot be declared with these two catch block types because they are incompatible.

9. What is the output of the following application?

```
package game;
public class Football {
    public static void main(String officials[]) {
        try {
            System.out.print('A');
            throw new RuntimeException("Out of bounds!");
        } catch (ArrayIndexOutOfBoundsException aioobe) {
            System.out.print('B');
            throw t;
        } finally {
            System.out.print('C');
        }
    }
}
```

- A. ABC
- B. ABC, followed by a stack trace for a RuntimeException
- C. AC, followed by a stack trace for a RuntimeException
- D. None of the above

10. What is the result of compiling and running the following application?

```
package castles;

public class Fortress {
    public void openDrawbridge() throws Exception { // p1
        try {
            throw new Exception("Circle");
        } catch (Exception e) {
            System.out.print("Opening!");
        } finally {
            System.out.print("Walls"); // p2
        }
    }

    public static void main(String[] moat) {
        new Fortress().openDrawbridge(); // p3
    }
}
```

- A. The code does not compile because of line p1.
- B. The code does not compile because of line p2.
- C. The code does not compile because of line p3.
- D. The code compiles, but a stack trace is printed at runtime.

11. Which of the following exception types must be handled or declared by the method in which they are thrown?

- A. `NullPointerException`
- B. `Exception`
- C. `RuntimeException`
- D. `ArithmeticException`

12. What is the output of the following application?

```
package game;

public class BasketBall {
    public static void main(String[] dribble) {
        try {
            System.out.print(1);
            throw new ClassCastException();
        } catch (ArrayIndexOutOfBoundsException ex) {
            System.out.print(2);
        } catch (Throwable ex) {
            System.out.print(3);
        } finally {
            System.out.print(4);
        }
        System.out.print(5);
    }
}
```

- A. 1345
- B. 1235
- C. The code does not compile.
- D. The code compiles but throws an exception at runtime.

13. Which of the following statements about a `finally` block is true?
- A. Every line of the `finally` block is guaranteed to be executed.
  - B. The `finally` block is executed only if the related `catch` block is also executed.
  - C. The `finally` statement requires brackets `{}`.
  - D. The `finally` block cannot throw an exception.

14. Given that `FileNotFoundException` is a subclass of `IOException`, what is the output of the following application?

```
package office;
import java.io.*;
public class Printer {
    public void print() {
        try {
            throw new FileNotFoundException();
        } catch (IOException exception) {
            System.out.print("Z");
        } catch (FileNotFoundException enfe) {
            System.out.print("X");
        } finally {
            System.out.print("Y");
        }
    }
    public static void main(String... ink) {
        new Printer().print();
    }
}
```

- A. XY
- B. ZY
- C. The code does not compile.
- D. The code compiles but a stack trace is printed at runtime.

15. Which keywords are required with a `try` statement?

I. `catch`

II. `finalize`

III. `finally`

A. I only

B. II only

C. I or III, or both

D. None of these statements are required with a `try` statement.



16. Which statement about the role of exceptions in Java is incorrect?

- A. Exceptions are often used when things “go wrong” or deviate from the expected path.
- B. An application that throws an exception will terminate.
- C. Some exceptions can be avoided programmatically.
- D. An application that can properly handle its exception may recover from unexpected problems.

17. What is the output of the following application?

```
package harbor;
class CapsizedException extends Exception {}
class Transport {
public int travel() throws CapsizedException { return 2; };
}
public class Boat {
public int travel() throws Exception { return 4; }; // j1
public static void main(String... distance) throws Exception{
try {
System.out.print(new Boat().travel());
} catch (Exception e) {
System.out.print(8);
}
}
}
```

- A. 4
- B. 8
- C. The code does not compile due to line j1.
- D. The code does not compile for another reason.

18. Which of following method signatures would not be allowed in a class implementing the Printer interface?

```
class PrintException extends Exception {}  
class PaperPrintException extends PrintException {}  
public interface Printer {  
    abstract int printData() throws PrintException;  
}
```

- A. public int printData() throws PaperPrintException
- B. public int printData() throws Exception
- C. public int printData()
- D. None of the above

19. Which import statement is required to be declared in order to use the Exception,

RuntimeException, and Throwable classes in an application?

- A. `import java.exception.*;`
- B. `import java.util.exception.*;`
- C. `import java.lang.*;`
- D. None of the above

20. Which statement about the following classes is correct?

```
class GasException extends Exception {}  
class Element {  
    public int getSymbol() throws GasException { return -1; } // g1  
}  
public class Oxygen extends Element {  
    public int getSymbol() { return 8; } // g2  
    public void printData() {  
        try {  
            System.out.print(getSymbol());  
        } catch { // g3  
            System.out.print("Unable to read data");  
        }  
    }  
}
```

- A. The code does not compile because of line g1.
- B. The code does not compile because of line g2.
- C. The code does not compile because of line g3.
- D. None of the above