PRO192 lý thuyết

Object-Oriented Programming (Trường Đại học FPT)

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1.A programmer need to create a logging method that can accept an arbitrary number of argument. For example, it may be called in these ways:

loglt("log message 1");

loglt("log message 2","log message 3");

loglt("log message 4","log message 5","log message 6");

which declaration satisfies this requirement?

A. public void loglt(String... msgs)

B. public void loglt(String[] msgs)

C. public void loglt(String * msgs)

D. public void loglt(String msgs1, String msgs2, String msgs3)

A

muốn số lượng đối số trong hàm tùy ý => dùng "..."

2. Which of the following would be illegal to place after the comment //here?

A. private void anothermethod(){}

B. public int amethod(int z){}

C. public int amethod(int i,int j){return 99;}

D. protected void amethod(long l){}

B

Không thể trùng signature: kiểu dữ liệu, tên hàm, các tham số trong hàm (overloading).

ACD hợp lệ do: A khác tên, C khác kiểu dữ liệu, D khác tham số.

3. What interfaces can be implemented in order to create a class that can be seraized?

A. No interfaces need to be implemented. All classes can be serialized

B. Have the class declare that it implements java.io.Serializable. There are no methods in the interface.

C. Have the class declare that it implements java.io.Serializable, which defines two methods, readObject and writeObject.

D. Have the class declare that it implements java.io.Externalizable, which defines two methods, readObject and writeObject.

Ans: B

4. In order for objects in a List to be sorted, those objects must implement which interface method?

A. Comparable interface its compare method

B. Comparable interface its compareTo method

C. Comparable interface its equals method

D. Compare interface its compareTo method

B

Interface thường có đuôi able.

5. which of the following classes supports developers to get the **pointer if a file**?
A. java.iopublicclass .FileStream
B. java.io.File
C. java.io.RandomAccessFile
D. java.io.FileInputStream

C

6. which of the following is the correct syntax for suggesting that the JVM performs garbage collection?
A. System.free();
B. System.setGarbageCollection();
C. System.gc();
D. System.out.gc();

C
Cú pháp dùng để gợi ý rằng JVM thực hiện thu gom rác: System.gc();

7. by default, the java.lang package is imported into every Java program

T

8. when creating your own class and you want to make it directly **support sorting**, which interface must it implement?
A. Comparable
B. Sortator
C. Sortable
D. Comparator

A

9. Which of the following statements is **true**?
A. A final object's data cannot be changed
B. A final class can be subclassed
C. A final method cannot be overloaded
D. A final object cannot ve reassigned a now address in memory

D
Một đối tượng final không thể gán lại một địa chỉ hiện tại trong bộ nhớ

10. To write object to an object file. The right order of object creations is:
A. FileOutputStream- ObjectOutputStream
B. FileReader - ObjectOutputStream

C. File - ObjectOutputStream - FileOutputStream
D. File - ObjectOutputStream - Writer

A

11. which of the following is true about Wrapped classes?
A. Wrapper classes are: Boolean, Char, Byte, Short, Integer, Long, Float, and Double
B. Wrapper classes are: Boolean, Character, Byte, Integer, Long, Float, and Double
C. Wrapper classes are classes that allow primitive types to be accessed as objects

C

12.
 2 answer
you have been givenn a design document for a veterinay registration system for implementation in Java. It states:
" A pet has an owner, a registration date, and a vaccination-due date. A cat is a pet that has a flag indicating whether it has been neutered, and a textual description of its markings."
Given that the Pet class has already been defined, which of the following fields would be appropriate for inclusion in the Cat class as members?
(Select the most appropriate two declarations).
A. Pet thePet;
B. Date vaccinationDue;
C. boolean neutered;
D. Date registered;
E. Cat theCat;
F. String markings

C F

13. Which of the following methods of the java.io.File can be used to *create a new file*?
A. newFile()
B. There is no such method. Just do File f = new File ("filename.txt"); then the newfile, named filename.txt will be created
C. createNewFile()
D. makeNewFile()

C

14. which of the following modifiers does not allow a variable to be modified (sửa đổi) its value once it was initialized?
A. transient
B. final
C. private

D. static

B

15. which of the following most closely describes (mô tả) the process of *overriding*?
A. A method with the same name but different parameters gives multiple uses for the same method name
B. A class is prevented from accessing methods in its immediate ancestor
C. A class with the same name replaces the functionality if a class defined earlier in the hierarchy
D. A method with the same name completely replaces the functionality of a method earlier in the hierarchy

D

Một phương thức có cùng tên thay thế hoàn toàn chức năng của một phương thức trước đó trong hệ thống kế thừa

16. select the most correct statement:
A. A protected method may only be accessed by classes or interfaces of the same package
B. A protected method may only be accessed by classes of the same package or by subclasses of the class in which it is declared
C. A protected method may only be accessed by the class in which it is declared or by the subclasses of that class
D. A protected method may only be accessed by classes or interfaces of the same package or by subclasses of the class in which it is declared

D

Một phương thức protected chỉ có thể được truy cập bởi các lớp hoặc interface của cùng một package hoặc bởi các lớp con của lớp mà nó được khai báo

17. A compound statement (câu lệnh ghép) is:
A. A collection of one or more statements enclosed in braces
B. a way of setting the value of a variable
C. a way of declaring variables
D. A statement involving if and else

A

Tập hợp một hoặc nhiều câu lệnh được đặt trong dấu ngoặc nhọn

18. **An overridden method can be in the same class**
A. F
B. Depends on the particular implementation of the Java Virtual Machine

C. T

F

19. Select correct statement

A. String objects are constants. StringBuffer objects are not
B. StringBuffer objects are constants. String objects are not
C. Both String and StringBuffer object are constants
D. Both String and StringBuffer object are not constants

A

20. the **ability** of a programming **language** to process objects differently depending on their type
is
A, Inheritance
B. Overloading
C. Polymorphism
D. Astraction
E. Encapsulation
F. Overriding
khả năng của một ngôn ngữ lập trình để xử lý các đối tượng khác nhau tùy thuộc vào loại của
chúng là

C

21. An instance of the java.ulti.Scanner class can read date from the keyboard (1), a file (2), a
string of characters (3)
1 is ..., 2 is ..., 3 is ...
A. None of the others
B. T F F
C. T F T
D. T T F
E. T T T

E. **T T T**

22. Select a correct statement about interfaces

A. An interface is a class that has method implementations with no data
B. An interface is an abstract class with no date
C. In its most common form, an interface is a group of related methods with empty bodies
D. An interface is a class that has at least one abstract method

C

Ở dạng phổ biến nhất, interface là một nhóm các phương thức có liên quan không có body

23. Select the most correct statement

A. If a checked exception may be thrown within the body of a method, the method must catch the exception
B. If a checked exception may be thrown within the body of a method, the method must declare it in its throwns clause
C. If a checked exception may be thrown within the body of a method, the method must either catch the exception or declare it in its throws clause
D. If a checked exception may be thrown within the body of a method, the method mus tcatch the exception and eclare it in its throws clause

C

24. Which of the following are checked exceptions? (select 2)
A. Exception
B. NullPointerException
C. IOException
D. NumberFormatException
E. IllegalArgumentException
F. StackOverflowError

Ans. A C

25. interfaces cannot extend .... but they can extend......
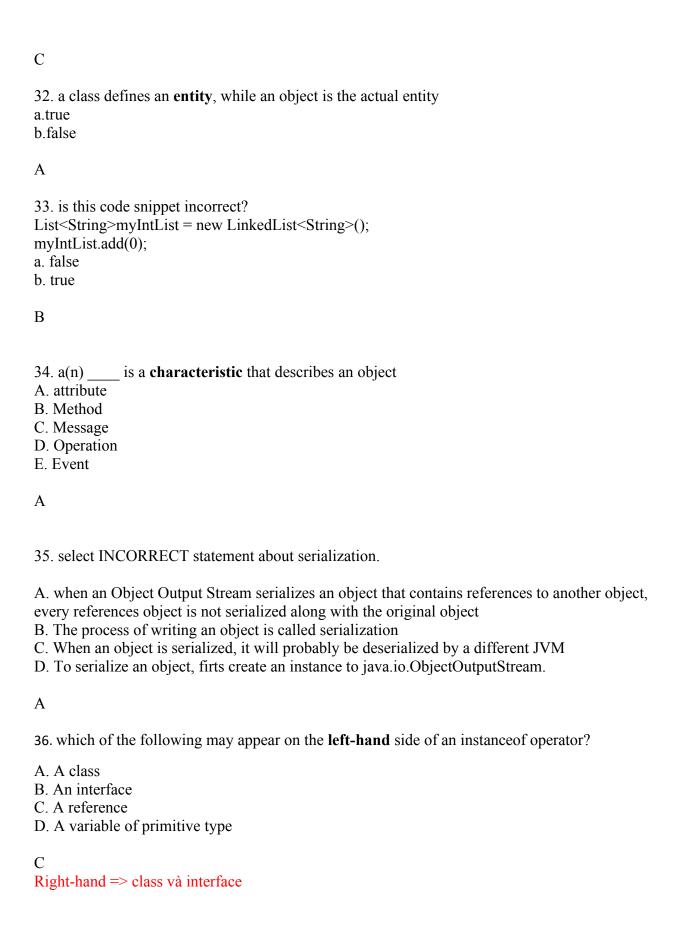A. classes, interfaces
B. classes, objects
C. interfaces, classes

A

26. _____ allows an operation to have different **behavior** on different objects
A. Polymorphism
B. Encapsulation
C. Destruction
D. Construction
E. Inheritance
F. Persistence

A

27.
2 Answer
which of the following are *legal*?
A. Vector <String> theVec = new Vector<String>**()**;
B. List<String> theList = new Vector<String>**()**;
C. List<String> theList = new Vector<String>;
D. Vector<String> theVec = new Vector<String>;

A, B

28. select the **correct syntax** for throwing an exception when declaring a method
A. [Modifier] {Return type] Identifier (Parameters) throws TypeOfException
B. [Modifier] {Return Type] Identifier (Parameters) *{*
 throws TypeOfException;
}
C. [Modifier] {Return type] Identifier (Parameters){
 throw TypeOfException;
}
D. [Modifier] {Return type] Identifier (Parameters) throw TypeOfException
E. None of the others

B

29. which of the following may be declared final (khai báo sau cùng)?
A. Methods
B. Classes
C. Interfaces

A, B

30. what method of the java.io.File class can **create** a file on the hard drive?
A. makeNewFile()
B. newFile()
C. makerFile()
D. createFile()
E. createNewFile()

E

31. how do you use the File class to list the contents of a directory?
A. StringBuider [] contents = newFile.list();
B. The File class does not provide a way to list the contents of a directory
C. String [] contents = myFile.list();
D. File [] contents = myFile.list();

C

32. a class defines an **entity**, while an object is the actual entity
a.true
b.false

A

33. is this code snippet incorrect?
List<String>myIntList = new LinkedList<String>();
myIntList.add(0);
a. false
b. true

B

34. a(n) _____ is a **characteristic** that describes an object
A. attribute
B. Method
C. Message
D. Operation
E. Event

A

35. select INCORRECT statement about serialization.

A. when an Object Output Stream serializes an object that contains references to another object, every references object is not serialized along with the original object
B. The process of writing an object is called serialization
C. When an object is serialized, it will probably be deserialized by a different JVM
D. To serialize an object, firts create an instance to java.io.ObjectOutputStream.

A

36. which of the following may appear on the **left-hand** side of an instanceof operator?

A. A class
B. An interface
C. A reference
D. A variable of primitive type

C
Right-hand => class và interface

37. all the method of the ___ class are static
A. String
B. Math
C. Svstem
D. Runtime

B
các hàm về toán học được sử dụng mà không cần phải tạo ra một đối tượng lớp **Math**

38. what is the result?
A, Compilation fails
B. doStuff x = 5 main x = 6
C. An exception is thrown at runtime.
D. doStuff x = 6 main x = 5
E. doStuff x = 5 main x = 5
F. doStuff x = 6 main x = 6

E
- Toán tử tăng trước ++x: tăng giá trị x trước khi thực hiện các phép toán khác trong cùng 1 câu lệnh
- Toán tử tăng sau x++: tăng giá trị x sau khi thực hiện các phép toán khác trong cùng 1 câu lệnh

39. An *object* is an **instance** of a *class*

A. F
B. T

T

40. which of these class is used to **read** characters in a file?

A. FileReader
B. InputStreamReader
C. FileInputStream
D. FileWriter

A

41. which of the following may override a method whose signature is void xyz(float f)?
A. public int xyz(float f)
B. public void xyz(float f)
C. private int xyz(float f)
D. private void xyz(float f)

B

Override => cùng signature

42. in which stream, data unit is primitive data type or string?
A. Binary high-level stream
B. Binary low-level stream
C. Character stream
D. Object stream

A

43. _____ is the **process of identifying and grouping** attributes and actions related to a particular entity as relevant to the application at hand
A. Persistence
B. Construction
C. Polymorphism
D. Data abstraction
E. Inheritance
F. Encapsulation

B
là quá trình xác định và nhóm các thuộc tính và hành động liên quan đến một thực thể cụ thể có liên quan đến ứng dụng hiện có

44. suppose prim is an int and wrapped is an Interger. Which of the following are legal Java statements?
A. prim = new Integer(9);
B. All the others
C. prim = wrapped;
D. wrapped = prim;
E. wrapped = 9;

B

45.
2 answers
which of the following keywords can be applied to the variables or methods of an **interface** ?
A. public
B. static
C. Depends on the particular implementation of the Java Virtual Machine
D. private
E. protected
F. inner

A B
từ khóa nào sau đây có thể được áp dụng cho các biến hoặc phương thức của **giao diện**?
=> public, static

46. a public member of a class can be accessed from anywhere; within the package, outside the package, within a subclass, as well as within a non-subclass.

A. T
B. F

A
một thành viên công khai của một lớp có thể được truy cập từ bất kỳ đâu; trong gói, bên ngoài gói, trong một lớp con, cũng như trong một lớp không phải là lớp con.

47. when you compile a program written in the Java programming language, the compiler converts the human-readable source file info platform-independent code that a Java Virtual Machine can understand. What is this platform-independent code called?
A. binary code
B. machine code
C. **bytecode**
D. cpu instruction

C

48. Is this declaration is correct?
MyList<Point> list = new MyList()<Point>
A. False
B. True

Ans: A

49. which of the following statements is INCORRECT?
A, If a class has any abstract methods it must be declared abstract itself
B. When applied to a class, the final modifier means it cannot be sub-classed
C. None of others
D. All methods in an abstract class must be declared as abstract

D
All methods in an abstract class must be declared as abstract

50. which of the statements below is true?

A. To change the current working directory, call the cd() method of the File class
B. To change the current working directory, call the changeWorkingDirectory() method of the File class
C. To change the current working directory, call the setWorkingDirectory() method of the File class
D. To check whether the file denoted by the abstract pathname is a directory or not, call the isDirectory() method of the File class

D

51. given the following declarations
String s1=new String("Hello")
String s2=new String("there");
String s3=new String();
Which of the following is legal operation?
A. s3=s1-s2;
B. s3=s1 && s2
C. s3=s1 && s2
D. s3= s1 + s2

D

52. which of the statement below is true?
A. UTF characters are all 16 bits
B. UTF characters are all 24 bits
C. Bytecode characters are all 16 bits
D. Unicode characters are all 16 bits
E. UTF characters are all 8 bits

D

53. The pack provides some of the most useful Java class that are frequently needed in all types of applications

A. java.lang
B. java.util
C. java.pack
D. java.io

A

54. is that declaration is correct?
MyList<Point> list = new MyList()<Point>

A. F
B. T

A
Thiếu (); ở cuối

55. Which of the following statement is true?
A. An interfaces can only contain method and not variables
B. interfaces cannot have constructors
C. A class may extend only one other class and implement only one interface
D. Interfaces are the Java approach to addressing its lack of multiple inheritance, but require implementing classes to create the functionality of the interfaces

B

56. which of the following statements is INCORRECT?
A. All of the methods in an interface are implicitly abstract
B. A method in an interface can access class level varriables
C. All of the variables in an interface are implicitly static
D. All of the variables in an interface are impicitly final

A
Tất cả các phương thức trong một interface là hoàn toàn trừu tượng

57. ---- allow you to organize your classes into smaller units and make it easy to locate and use the appropriate class file
A. classpath
B. package
C. Directory
D. Folder

B

58. The process of bringing an object into **existence** is called construction
A. T
B. F

A

59. All objects belonging to the same class have the same characteristics and possible actions
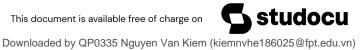A. T
B. F

B

Tất cả các đối tượng thuộc cùng một lớp có cùng đặc điểm và các hành động có thể xảy ra
=> sai

60.
 2 answer

which of the following can you perform using the File class?
A. Return the name of the parent directory
B. Delete a file
C. **Find of a file constains text or binary information**
D. **Change the current directory**

C, D

61. Suppose the declared type of x is a class, and the declared type of y is an interface. When is the assignment x = y; legal?
A. When the tyoe if x is an array
B. Always
C. When the type of x is Object
D. Never

C
Giả sử kiểu được khai báo của x là một lớp và kiểu được khai báo của y là một giao diện. Khi nào thì giao x = y; hợp pháp?

62. Which of the following signtures is valid for the main() method entry point of an application?
A. public static void main()
B. public static void main(String[] args)
C. public void main(String [] arg)
D. Public static int main(String [] arg)

B

63. All of the **numeric** wrapper classes in the java.lang package are subclasses of the abstract class .....
A. java.lang.Integer
B. java.lang.Wrapper
C. java.lang.Object
D. java.lang.Number

D

64.

2 answers
if(check4Biz(storeNum) != null) {}
Referring to the above, what data type could be returned by method check4Biz()?
A. Boolean
B. String
C. char
D. int
E. Byte

A, B

65. which of the following statements can be used to call a constructor of the **super** class from its sub-class?

A. makeSuper();
B. super();
C. call();
D. invokeSuper();

B
super();

66. Which of these keywords can be used to prevent Method overriding?
A. static
B. super
C. finally
D. final

D

67. When you use the new keyword to create an object, where is it created?
A. Heap
B. Garbage collector
C. Queue
D. Stack
E. depends on the particular implementation of the java virtual machine

D

68. if you wanted to find out where the position of the letter v (ire return 2) int the string s containing "Java", which of the following could you use?
A. charAt(2);
B. **s.indexOf('v');**
C. indexOf(s,'v');
D. mid(2, s);

B

nếu bạn muốn tìm vị trí của ký tự v (ire return 2) trong chuỗi s chứa "Java", bạn có thể sử dụng cách nào sau đây?

69. select the correct statement:
A. An object reference cannot be cast to an interface reference
B. An object reference can cast to an interface reference when the object implements all methods of the referenced interface
C. An object reference can cast to an interface reference when the object implements the reference interface
D. An object reference can always be cast to an interface reference

B

Một tham chiếu đối tượng có thể truyền đến một tham chiếu giao diện khi đối tượng triển khai tất cả các phương thức của giao diện được tham chiếu

70. which of the following statement(s) is(are) true?
1)An abstract class cannot have any final methods
2)A final class may not have any abstract methods
A. Both statement 1 and 2
B. Only statement 1
C. Only statement 2
D. None of them

C

1) Một lớp trừu tượng không thể có bất kỳ phương thức final nào
2) Một lớp final có thể không có bất kỳ phương thức trừu tượng nào

71. The process of identifying **common features** of objects and methods is
A. Abstraction
B. Inheritance
C. Overloading
D. Polymorphism
E. Overriding
F. Encapsulation

A

72. which of the following collections supports accessing elements through **keys and values**?
A. HashMap
B. HashTree
C. HashList
D. **HashSet**

D

73) which of the following class implement java.util.**List**?
A. java.util.HashMap
B. java.util.**LinkedList**
C. java.util.TreeSet
D. java.util.**ArrayList**

BD

74. if all three top-level elements occur in a source file, they must appear in which orfer?
A. Imports, package declarations, classes/interfaces/enums
B. Classes/interfaces/enums, Imports, package declarations
C. Imports must come first; order for package declarations and Class/interface/enum definitions is not significant
D. **Package declarations, imports, Class/interface/enum definitions**
E. Package declaration must come first, order fir imports and class/interfaces/enum definitions is not significant

D

74. which of the following methods of the java.io.File can be used to check whether a file exists or not?
A. isExists()
B. **exists()**
C. canExists
D. doExists()

B

75. An object is an instance of a class

T

76. which of the following **should** always be caught?
A. Errors other than asserition errors
B. Asserition errors
C. **Checked exceptions**
D. Runtime exceptions

C

77. Fill the blanks: (1) The java.io. class makes it easier to write platform-independent code that examines and manipulates files. D A

(2) The Java.io. class makes it easier to write platform-independent code that examines and manipulates folders. |

Ans: file, file

What is the purpose of the finally clause of a try-catch-finally statement? (Select correct answer)
Ans:| the finally clause is used to provide the capability to execute code no matter whether or matter whether or not an exception is throw or caught

Which of the following methods of the java.io.File can be used to check whether a file can be read or not?
A. checkRead()
B. **canRead()**
C. read()
D. isRead()

B

78. what interface can be implemented in order to create a class that can be serialized?
A. No interfaces need to be implemented. All class can be serialized
B. Have the class declare that it implements java.io.Externalizable, which defines two methods: readObject and writeObject
C. Have the class declare that it implements jave.io.Serializable, which defines two methods: readObject and writeObject
D. **Have the class declare that it implements java.io.Serializable. There are no methods in the interface**

D
java.io.Serializable: no methods
java.io.Externalizable, two methods: readObject and writeObject

79. Which of the following statements is true?
A. Under no circumstances can a class be defined with the private modifier
B. A inner class may under some circumstances be defined with the protected modifier
C. An interface cannot be instantiated
D. Adding more classes via import statements will cause a performance overhead, only import classes you actually use

B C
B. Trong một số trường hợp, một lớp bên trong có thể được định nghĩa bằng private modifier
C. **Không thể** khởi tạo interface

80. The _____ method is used to **replace a character in a StringBuffer**, with another at a specified position
A. replaceCharAt()
B. setStringAt()
C. replace()
D. setCharAt

D
setCharAt()

81. which of the File class description statements below is WRONG?
A. File class is a class which could be found in java.io package
B. File class helps accessing file/dictionary information only
C. File class has only one constructor with a file path parameter
D. File class doesn't have any method to access data in a file

C
File class chỉ có một hàm tạo với tham số đường dẫn tệp => SAI

82. which of the following is illegal statement?
A. int i=1/3;
B. double d=999d;
C. float f=1.01;
D. float f=1/3;

C
Đúng: float f = 1.01f hoặc thay f thành double.

83. 2 answers
which two of the following interfaces are at the top of the hierarchies in the **Java Collections Framwork?**
A. Queue
B. SortedMap
C. Collection
D. Map
E. **List**
F. **Set**

E F

84. 2 answers
A varriable declared with the **default** modifier can be accessed by _____
A. the class containing that variable only
B. **same package different classes**
C. different packages and different classes
D. **same package sub classes**

E. all classes
F. different package and sub classes

B D

85. your programming problem is to create a list of **unique values of part ID numbers** in a large **collection** of data respresention **orders**. Furthermore, it would be nice if the list was **in sorted order.**
You have decided to use one of the collection classes in the java.util package to construct this list. Which of the following interfaces should the ideal class implement?
A. Map
B. List
C. SortedMap
D. Set
E. SortedSet

E

86. The java.util.Vector class provides storage for object references in the order of addition and automatically expands as needed. Which of the following classes is **closest in function to the Vector class**?
Select one:
a. java.util.LinkedList
b. **java.util.ArrayList**
c. java.util.Hashtable
d. java.util.List

B

87.

(1) A value varriable contains data's value
(2) A reference variable contains the address of data.
The statement(1) is _____. and the statement(2) is_____
A. T, T
B. F, T
C. T, F
D. F, F

A. T T
(1) Một biến giá trị chứa giá trị dữ liệu
(2) Một biến tham chiếu chứa địa chỉ của dữ liệu.

88.What is -8 % 5
A. 3
B. -3
C. 2

D. -2

B

89.State true or false:
If class Y extends class X, the two classes are in different package, and class X has a protected method called fun(), then any instance of Y may call the fun() method of any other instance of Y

F

90. 2 answers
which of the following may appear on the right-hand side of an instanceof operator?
A. A reference
B. An interface
C. A varriable of primitive type
D. A class
E. The name of a primitive type

B D

91. Which of the following are correct ways of declaring an integer array named myVar
A. myVarint[];
B. **int myVar[];**
C. **int[ ] myVar;**
D. intmyVar{};
E. int [myVar];
F. myVar[] int;

B C

92. _____ class **reads bytes** from a file
A. **FileInputStream**
B. FileOutputStream
C. InputStream
D. FileInput

A

93. what does the following line of code mean?
double table[];
A. table is a varriable that refers to two numbers
B. table is a varriable to refers to a real number
C. It is not legal Java code
D. table is a varriable that **refers to an array**

D

94. which of the following is an example of a Java **bool-expression**?
A. x = 6
B. cause == bYes
C. 70
D. 1=2

B

95. which of the following methods of the Collections class can be used to find the largest value in a Vector?
A. Collections.maxElement()
B. We don't need any method because elements in Vector are automatically stored. Therefore, the first element contains the maximum value
C. **Collections.max()**
D. Collections.maxValue()

C

96. You need to create a class that will store unique object elements. You do not need to sort these element but they must be unique. What interface might be most suitable to meet this need?
A. Set
B. List
C. Map
D. Vector

Ans: A

97. a java source code will be compiled to__
A. Machine code
B. **Java bytecode**
C. Operation system code
D. Assembly code

B

98. Whenever a method does not want to handle exception using the try block, the _____ is used?
A. **throws**
B. throwable
C. throw
D. mothrows

A

99. 2 answers
which of these statements about the value that appears in a switch statement are correct?
A. The value can be of type char
B. The value can be of type boolean
C. The value can be of type long
D. The value can be of type byte

A D
Các kiểu sử dụng được trong switch: char, byte, int, short, enum

100. Classes that are intended to be used outside the package within other programs must be declared_____
A. static
B. public
C. default
D. private

B
Các lớp được dự định sử dụng bên ngoài package trong các chương trình khác phải được khai báo public.

101. What is the value of x after the following operation is performed? int x = 32 % 5;
A. 32
B. 6
C. 6.4
D. 2

B

102. For a class defined inside a method, what rule governs access to the variables of the enclosing method
A. The class can access any variable
B. The class can only access static variables
C. The class can only access transient variables
D. The class can only access final variables

D

103. 2 answers
Which of the following statements are true?
A. There are No circumstances where an inner class may be defined as private
B. An inner class may be defined as static
C. An inner class may extend another class
D. A programmer may only provide one constructor for an anonymous class

B C

61.
2 answers
Which of the following statements are true?
A. There are No circumstances where an inner class may be defined as private
B. An inner class may be defined as static
C. An inner class may extend another class
D. A programmer may only provide one constructor for an anonymous class

B C
62.
2 answers
Choose the valid identifiers from those listed here
A. $int
B. byte
C. BigOILongStringWithMeaninglessName
D. 1$2
E. finally

A C
Valid identifiers: chấp nhận kí tự chữ, số, dấu _, dấu $.
Không được có space, không được có số ở đầu (D), không được trùng các từ khóa có sẵn (B, E).

63.

Which of the following statements is true?
A. A final class may not contain non-final data fields
B. A final class may only contain final methods
C. **A final class cannot be extended**
D. A final class must be instantiated

C
64.

2 answers
given the following
List<String> names = news ArrayList<String>();
which of the following are legal?
A. **Iterator<String> iter = names.iterator();**
B. while (String s:names)
C. **for (String s:names)**

A C
65.
which of the following is legal import statement?
A. None of the other choices
B. **import java.util.Vector;**
C. static import java.util.Vector.*;

D. import java.util.Vector static;

B
66.
you want to loop through an array and stop when you come to the last element. Being a good java programmer and forgetting everything you ever knew about C/C++ you know that arrays contain information about their size. Which of the following can you use?
A. myarray.**length**;
B. myarray.length();
C. myarray.size();
D. myarray.size

A
67.
2 answers
which of the following statements are true with package?
A. In Java, a package is a combination of class, interfaces and sun-packages
B. A package in Java can be created by including a package statement as the first statement in a Java program
C. The classes in a package must not be saved under a folder that bears the same name as the package

A C
A. Trong Java, một package là sự kết hợp của lớp, giao diện và sun-package
 B. Một package trong Java có thể được tạo bằng cách bao gồm một câu lệnh package làm câu lệnh đầu tiên trong chương trình Java => SAI
C. Các lớp trong một package không được lưu trong một thư mục có cùng tên với package

68.
 If your method overrides one of its supperclass's methods, you can invoke the overridden method through the keyword parent

F
Nếu phương thức của bạn ghi đè một trong các phương thức của supperclass, bạn có thể gọi phương thức được ghi đè thông qua từ khóa cha.

69.
select a correct statement:
A. void f(double d, int ... x, int y) {}
B. void f(int ... x, int ... y) {}
C. void f(int ... x, int y) {}
D. void f(int x, int ... y) {}

D

void f(int x, int ... y) {}

70.

which of the following is INCORRECT?
A. char c = \u1234;
B. char c = 0x1234;
C. String x = "ABC" + 2;
D. char c = '\u1234';

71.

If you need a Set implementation that provides **value-ordered iteration**, which class should you use?
A. TreeSet
B. HashSet
C. LinkHashSet

A.**TreeSet**
Nếu bạn cần triển khai Set cung cấp phép lặp theo thứ tự giá trị, bạn nên sử dụng lớp nào?

72.

when a negative long is cast to a byte, what is the possible value of the result?
A. The value may be negative, zero or positive
B. Positive
C. Negative
D. Zero

A
The value may be negative, zero or positive

73.

select the most correct statement
A. An interface may be declared as public, protected or private
B. An interface may be declared as public, protected, private or abstract
C. **An interface may be declared as public or abstract**
D. An interface may be declared as public or protected

C

74.

which of the following statements is correct?
A. only primitives are converted automatically: to change the type of an object reference, you have to do a cast
B. Arithmetic promotion of object references requires explicit casting
C. **Both primitives and object references can be both converted and cast**
D. Only object references are converted automatically: to change the type of a primitive, you have to do a cast

C

75.
Which of the following is true?
A. Both >> and >>> operators carry the sign bit when shifting right
B. The >>> operator carries the sign bit when shifting right. The >> zero-fills bits that have been shifted out
C. Both >> and >>> operators zero-fills bits that have been shifted out
D. The **>>** operator carries the sign bit when shifting right. The **>>** zero-fills bits that have been shifted out

D

76.
A. Set all references to the object to new values (null, for example)
B. Call System.gc(). passing in a reference to the object to be garbage-collected
C. Call Runtime.gc()
D. **Garbage collection cannot be forced**
E. Call System.gc()

D

77.
 a generic class can have only one type parameter
F
một lớp chung chỉ có thể có một loại tham số => SAI

78.
you can prevent a class from being sub-classed by using the_____ keyword in the class's declaratio
A. private
B. static
C. final
D. protected

C
bạn có thể ngăn một lớp bị phân thành lớp con bằng cách sử dụng từ khóa_____
trong phần khai báo của lớp => FINAL

79.

2 answers
Which of the following are true?
A. **Primitives are passed by value**

B. Primitives are passed by reference
C. **References are passed by reference**
D. References are passed by value

A D

80.
Statement 1: A protected member of a class can be accessed from any class in the same package and from a subclass that is outside the package. Statement 2: A member of a class that is declared private can not be accessed only within the class but nowhere outside the class. Choose the correct answer?
Select one:
a. Both Statement 1 and Statement 2 are FALSE
b. Both Statement 1 and Statement 2 are TRUE
c. Statement 1 is FALSE, Statement 2 is TRUE
d. Statement 1 is TRUE, Statement 2 is FALSE

B**. Both Statement 1 and Statement 2 are TRUE**
Mệnh đề 1: Một thành viên được bảo vệ của một lớp có thể được truy cập từ bất kỳ lớp nào trong cùng một gói và từ một lớp con nằm ngoài gói.
Mệnh đề 2: Một thành viên của một lớp được khai báo là private không thể chỉ được truy cập trong lớp mà không thể truy cập được bên ngoài lớp

81.
when mutiple methods exist within the same class with different method signatures, this is known as what?
A. There is nothing one can say
B. Message passing
C. Overriding methods
D. A headache
E. Method overloading

E
khi nhiều phương thức tồn tại trong cùng một lớp nhưng signature khác nhau

82.
Which of the following statements is false?
A. Values stored in TreeSet are automatically sorted
B. **Vector does not allow duplicate elements**
C. ArrayList can duplicate elements
D. TreeSet does not allow duplicate elements

B

83.

Suppose salaries is an array containing **floats**. Which of the following are valid loop control statements for processing each element of salaries

A. for (int i::salaries)
B. for (float f::salaries)
C. **for (float f:salaries)**
D. for (int i:salaries)

C

84.

2 answers
which of the following operators can perform promotion on their operands?
A. +
B. - -
C. ++
D. !
E. -

A E
+ -

85.

which of the following may legally appear as the new type **(between the parentheses)** int a cast operation?
A. Arrays of classes
B. Arrays of interfaces
C. Classes
D. Interfaces
E. **All of the others**

86.

Which of the following may legally appear as the new type (between the parentheses) in a cast operation?
A. Abstract classes
B. Final classes
C. Primitives
D. All of the above

87.

which line contains only legal statements?
A. String x = "Hello"; int y = 9; y += x; //khai báo 2 lần y
B. String x = "Hello"; int y = 9; x = x + y; //hợp lệ

C. String x = "Hello"; int y = 9; y = y + x; //tương tự A
D. String x = "Hello"; int y = 9; if(x == y) {} //không thể so sánh String và int

B

88.

Assuming any exception handing has been set up, which of the following will create an instance of the RandomAccessFile class?
A. RandomAccessFile raf=new RandomAccess("myfile.txt");
B. RandomAccessFile raf=new RandomAccess(new File("myfile.txt"));
C. RandomAccessFile raf=new RandomAccess**("myfile.txt","rw");**
D. RandomAccessFile raf=new RandomAccess(new DataInputStream());

C
RandomAccessFile là một điểm bất thường trong kiến trúc Java I / O. Nó đi xuống trực tiếp từ Đối tượng và không phải là một phần của kiến trúc Luồng.

89.

Which of these stream contains the classes which can work on character stream?
A. InputStream
B. OutputStream
C. Character Stream
D. Byte Stream

C. Character Stream

90.

 Suppose class A has a method called doSomething(), with default access.
Suppose class B extends A and overrides doSomething(). Which access modes may **not apply** to **B's version** of doSomething()? (Choose one)
a. public
b. private
c. protected
d. Default
B

91.
Suppose class Supe, in package packagea, has a method called
doSomething(). Suppose class Subby, in package packageb, overrides doSomething(). What access modes may **Subby's** version of the method have? (Choose two.)
a. public
b. protected

c. Default
d. private
A, B

92.

When an int value is add to a double value , what is the type of the result?
A. double
B. int
C. float
D. You can't add a short to a float

A

93.
Which of the following signatures is valid for the main() method entry point of an application?
A. public static void main()
B. public static void main(String [] args)
C. public void main (String [] arg)
D. public static int main(String [] arg)

B

94.
You want to loop through an array and stop when you come to the last element. Being a good java programmer and forgetting everything you ever knew about C/C++ you khow that arrays contain information about their size . Which of the following can you use?
A. myarray.length();
B. myarray.length;
C. myarray.size;
D. myarray.size;

B

95.
which of the following statements is true ?
A. Constructors cannot have a visibility modifier
B. Constructor can be marked public and protected, but not private
C. Constructors can only have a primitive return type
D. Constructors are not inherited

D

96.
What is difference between class and object ?(Select the best answer)

A. A class describes object behavior and an object defines class properties
B. A class is a template for objects and an object is an instance of a class
C. Class and object are essentially the same , they only differ in name
D. An object is a logical entity while class is a physical entity

A

97.
In order to use the TreeSet class, the class that describes elements must implement the
.... interface
A. java.lang.Comparable
B. java.lang.Comparing
C. java.util.Comparable
D. java.util.treeset.Compare

A

98.
 If all three top-level elements occur in a source file , they must appear in which order?
A. Imports, package declarations, classes/ interfaces/enums
B. Class/ interfaces/enums, imports, package declarations
C. Package declaration must come first; order for import and class/ intefaces/enum
definitions is not significant
D. Package declaration, import, class/interface/enum definitions
E. Import must come first , order for package declaration and class/interface/ enum
definitions is not significant

D

99.
Which of the following may overide a method which signature is void ABC(int i)?
A. private void ABC(int k)
B. public void ABC(int k)
C. int ABC(int k)
D. private int ABC(int k)

B

100.
vs
 are correctly defined class , X and Y are correctly defined interfaces and all statment in
branket pair() are also correct. Which of the following is the corrrect declaration of the
class Test?
A. class Test extend A, B implements X,Y {}
B. class Test extend A,B implements X{ }
C. class Test extends A implements X,Y{}

D. class Test extend A, implements X,Y{}

C

101.
Suppose a class has public visibility in this class we define a protected method. Which of the following statements is correct?
A. This method is only accessible from inside the class itself and from inside all subclass
B. In a class, you cannot declare methods with lower visibility than the visibility of the class in which it is defined
C. From within protected method you do not have access to public methods
D. This method is accessible from within the class itself and from when all classes are defined in the same package as the class itself

D

102.
Java array always start of index 0
103.
Which of the following statements is true ?

A class may extend only one other class but may implement many interfaces

104.
A variable declared with the default modifier can be accessed by _____
(Select 2)
A. different packages and different classes
B. same package different classes
C. same package sub classes
D. different packages and sub classes
E. all classes
F. the class containing that variable only

ANS: B, C

105.
Which of the following statements regarding "the final " modifier are true? (select 3)
A. A variable defined as "final" is a constant
B. A class declared as being "final" can be subclassed
C. A method declared "final " cannot be overridden in the subclass
D. A class declared as being "final " cannot be subclassed
E. A method declared "final" can be overridden in the subclass

A, C, D

106.

What must a class do to implement an interface? (Select correct answer)
A. It must provide all of the methods in the interface and identify the interface in its implements clause
B. It must provide all of the methods in an interface
C. It must identify the interface in its implements clause
D. It must provide all of the methods in the interface and identify the interface in its implements clause and does not extend any other class

A

107.
Suppose ob1 and ob2 are references to instances of java.lang.Object. If (ob1 == ob2) is false, can ob1.equals(ob2) ever be true?
A. Yes
B. No

No

108.
 Which of the following operations might **throw an ArithmeticException**?
A. >>
B. >>>
C. <<
D. None of these

None of these

109.
 Which of the following operations might **throw an ArithmeticException**?
A. +
B. -
C. *
D. /
E. None of these

/

110.
What is -50 >> 1?
A. A negative number with very large magnitude.
B. A positive number with very large magnitude.
C. -100
D. -25
E. 100
F. 25

111.
Which of the following statements is true?
A. Transient methods may not be overridden.
B. Transient methods must be overridden.
C. Transient classes may not be serialized.
D. Transient variables must be static.
E. Transient variables are not serialized.

Transient variables are **not serialized.**

112.
 Which modifier or modifiers should be used to denote a variable that should not be written out as part of its **class's persistent state**? (Choose the shortest possible answer.)
A. private
B. protected
C. private protected
D. transient
E. volatile

113.
Which of the following statements are true?
A. An abstract class may be instantiated.
B. An abstract class must contain at least one abstract method.
C. An abstract class must contain at least one abstract data field.
D. An abstract class must be overridden.
E. An abstract class must declare that it implements an interface.
F. None of the above.

None of the above.
A. Một lớp trừu tượng có thể được khởi tạo.
B. Một lớp trừu tượng phải chứa ít nhất một phương thức trừu tượng.
C. Một lớp trừu tượng phải chứa ít nhất một trường dữ liệu trừu tượng.
D. Một lớp trừu tượng phải được ghi đè.
E. Một lớp trừu tượng phải khai báo rằng nó thực hiện một giao diện.

114.
Suppose interface Inty defines five methods. Suppose class Classy declares that it implements Inty but does not provide implementations for any of the five interface methods. Which is/are true?
A. The class will not compile.
B. The class will compile if it is declared public.
C. The class will compile if it is declared abstract.
D. The class may not be instantiated.

The class will compile if it is **declared abstract.**
The class **may not be instantiated.**
Lớp sẽ biên dịch nếu nó được khai báo là trừu tượng.
Lớp có thể không được khởi tạo

115.
Which of the following may be declared final? (Choose all that apply.)
A. Classes
B. Data
C. Methods

Classes
Data
Methods

116.
Which of the following may follow the static keyword? (Choose all that apply.)
A. Class definitions
B. Data
C. Methods
D. Code blocks enclosed in curly brackets

Data
Methods
Code blocks enclosed in curly brackets

117.
Suppose class A has a method called doSomething(), with default access. Suppose
class B extends A and overrides doSomething(). Which access modes **may apply** to
B's version of doSomething()? (Choose all that apply.)
A. public
B. private
C. protected
D. Default

public
protected
Default
(chú ý phân biệt với **may NOT apply**)

118.
Which of the following statements are true?
A. A final class must be instantiated.
B. A final class may only contain final methods.
C. A final class may not contain non-final data fields.

D. A final class may not be extended.
E. None of the above.

A final class **may not be extended.**

119.
 Which of the following statements is true? (Choose one.)
A. Object references can be converted in assignments but not in method calls.
B. Object references can be converted in method calls but not in assignments.
C. Object references can be converted in both method calls and assignments, but the rules governing these conversions are very different.
D. Object references can be converted in both method calls and assignments, and the rules governing these conversions are identical.
E. Object references can never be converted.

Object references can be converted in **both method calls and assignments**, and the rules governing these conversions are identical.
Các tham chiếu đối tượng có thể được chuyển đổi trong cả lệnh gọi và phép gán phương thức, đồng thời các quy tắc điều chỉnh các chuyển đổi này là giống hệt nhau.

120.
Suppose the type of xarr is an array of XXX, and the type of yarr is an array of YYY.
When is the assignment xarr = yarr; legal?
A. Sometimes
B. Always
C. Never

Sometimes

121.
When is x & y an int? (Choose one).
A. Always
B. Sometimes
C. When neither x nor y is a float, a long, or a double

Sometimes

122.
 What are the legal types for whatsMyType?
short s = 10; whatsMyType = !s;

A. short
B. int
C. There are no possible legal types.

There are no possible legal types.

123.
What is the difference between the rules for method-call conversion and the rules for assignment conversion?
A. There is no difference; the rules are the same.
B. Method-call conversion supports narrowing, assignment conversion does not.
C. Assignment conversion supports narrowing, method-call conversion does not.
D. Method-call conversion supports narrowing if the method declares that it throws ClassCastException.

There is no difference; the rules are the same

124.
Which of the following will output -4.0
A. System.out.printin(Math floor(-4.7)),
B. System.out.printin(Math.round(-4.7));
C. System.out.printin(Math.ceil(-4.7));
D. System.out.printin(Math.min(-4.7));

Ans: C

125.
The ___ class is the top of the class hierarchy

Ans: Object

126.
 When is it appropriate to pass a cause to an exception's constructor?
A. Always
B. When the exception is being thrown in response to catching of a different exception type
C. When the exception is being thrown from a public method
D. When the exception is being thrown from a private method

When the exception is being thrown **in response to catching of a different exception type**

127.
When does an exception's stack trace (dấu vết) get recorded (được ghi lại) in the exception object?
A. When the exception is constructed
B. When the exception is thrown
C. When the exception is caught
D. When the exception's printStackTrace() method is called

When the exception is constructed

128.
When is it appropriate to write code that constructs and throws an error?
(phù hợp để constructs và throws 1 lỗi)
A. When a public method's preconditions are violated
B. When a public method's postconditions are violated
C. When a nonpublic method's preconditions are violated
D. When a nonpublic method's postconditions are violated
E. Never

Never

9. Which of the following statements are true? (Choose all that apply.)

A. Given that Inner is a nonstatic class declared inside a public class Outer and that appro- priate constructor forms are defined, an instance of Inner can be constructed like this: new Outer().new Inner()

B. If an anonymous inner class inside the class Outer is defined to implement the interface

ActionListener, it can be constructed like this: new Outer().new ActionListener()

C. Given that Inner is a nonstatic class declared inside a public class Outer and that appro- priate constructor forms are defined, an instance of Inner can be constructed in a static method like this: new Inner()

D. An anonymous class instance that implements the interface MyInterface can be constructed and returned from a method like this:

1. return new MyInterface(int x) {

2. int x;

3. public MyInterface(int x) {

4. this.x = x;5. }6. };

A

Given that Inner is a nonstatic class declared inside a public class Outer and that appro-priate constructor forms are defined, an instance of Inner can be constructed like this: **new Outer().new Inner()**

11. Which of the following may **override** a method whose signature is void xyz(float f)?

A. void xyz(float f)

B. public void xyz(float f)

C. private void xyz(float f)

D. public int xyz(float f)

E. private int xyz(float f)

void xyz(float f)

 public void xyz(float f)

override => giống signature

Select correct statements.

(1) A public member of a class can be accessed in all classes.

(2) A default member of a class can be accessed in all classes. ans

(3) A protected member of a class can be accessed in the package containing this class.

(4) A private member of a class can be accessed in the package containing this class.

Ans: 1.3

Which is true in Java programming?

A. X extends Y is correct if and only if X is a class and Y is an interface

B. X extends Y is correct if and only if X is an interface and Y is a class

C. X extends Y" is correct if X and Y are either both classes or both interfaces

D. X extends Y" is correct for all combinations of X and Y being classes and/or interfaces

Ans: C

14. Suppose x and y are of type TrafficLightState, which is an enum. What is the best way to test whether x and y refer to the same constant?

A. if (x == y)

B. if (x.equals(y))

C. if (x.toString().equals(y.toString()))

D. if (x.hashCode() == y.hashCode())

if (x == y)

---

15. Which of the following restrictions apply to anonymous inner classes?

A. They must be defined inside a code block.

B. They may only read and write final variables of the enclosing class.

C. They may only call final methods of the enclosing class.

D. They may not call the enclosing class' synchronized methods.

They must be defined inside a code block.

---

18. Which methods return an enum constant's name?

A. getName()

B. name()

C. toString()

D. nameString()

E. getNameString()

B C

name()

toString()

9. Which of the following statements about threads is true?

A. Every thread starts executing with a priority of 5.

B. Threads inherit their priority from their parent thread.

C. Threads are guaranteed to run with the priority that you set using the setPriority() method.

D. Thread priority is an integer ranging from 1 to 100.

Threads inherit their priority from their parent thread.

Các luồng kế thừa mức độ ưu tiên của chúng từ luồng parent của chúng.

---

10. Which of the following statements about the wait() and notify() methods is true?

A. The wait() and notify() methods can be called outside synchronized code.

B. The programmer can specify which thread should be notified in a notify() method call.

C. The thread that calls wait() goes into the monitor's pool of waiting threads.

D. The thread that calls notify() gives up the lock.

The thread that calls wait() goes into the monitor's pool of waiting threads.

---

13. How many locks does an object have?

A. One

B. One for each method

C. One for each synchronized method

D. One for each non-static synchronized method

One

---

14. Is it possible to write code that can execute only if the current thread owns multiple locks?

A. Yes.

B. No.

Yes.

Có thể viết mã chỉ có thể thực thi nếu luồng hiện tại sở hữu nhiều khóa không?

---

17. How do you prevent shared data from being corrupted in a multithreaded environment?

A. Mark all variables as synchronized.

B. Mark all variables as volatile.

C. Use only static variables.

D. Access the variables only via synchronized methods.

Access the variables only via synchronized methods.

---

18. How can you ensure that multithreaded code does not deadlock?

A. Synchronize access to all shared variables.

B. Make sure all threads yield from time to time.

C. Vary the priorities of your threads.

D. A, B, and C do not ensure that multithreaded code does not deadlock.

A, B, and C do not ensure that multithreaded code does not deadlock.

---

3. Suppose you want to write a class that offers static methods to compute hyperbolic trigonometric functions. You decide to subclass java.lang.Math and provide the new functionality as a set of static methods. Which one statement is true about this strategy?

A. The strategy works.

B. The strategy works, provided the new methods are public.

C. The strategy works, provided the new methods are not private.

D. The strategy fails because you cannot subclass java.lang.Math.

E. The strategy fails because you cannot add static methods to a subclass.

The strategy **fails** because you **cannot subclass java.lang.Math.**

6. In the following code fragment, after execution of line 1, sbuf references an instance of the

StringBuffer class. After execution of line 2, sbuf still references the same instance.

1. StringBuffer sbuf = new StringBuffer("abcde");

2. sbuf.insert**(3, "xyz");**

A. True

B. False

True

---

7. In the following code fragment, after execution of line 1, sbuf references an instance of the

StringBuffer class. After execution of line 2, sbuf still references the same instance.

1. StringBuffer sbuf = new StringBuffer("abcde");

2. sbuf.append**("xyz");**

A. True

B. False

True

---

8. In the following code fragment, line 4 is executed.

1. String s1 = "xyz";

2. String s2 = "xyz";

3. if (s1 == s2)

4. System.out.println("Line 4");

A. True

B. False

True

9. In the following code fragment, line 4 is executed.

1. String s1 = "xyz";

2. String s2 = new String(s1);

3. if (s1 == s2)

4. System.out.println("Line 4");

A. True

B. False

False

Line 4 không execute vì dùng new để khởi tạo s2 => không ==

20. Which of the following statements are true?

A. StringBuilder is generally faster than StringBuffer.

B. StringBuffer is generally faster than StringBuilder.

C. StringBuilder is threadsafe; StringBuffer is not.

D. StringBuffer is threadsafe; StringBuilder is not.

StringBuilder is generally faster than StringBuffer.

StringBuffer is threadsafe; StringBuilder is not.

---

2. Which of the statements below are true? (Choose all that apply.)

A. When you construct an instance of File, if you do not use the file-naming semantics of the local machine, the constructor will throw an IOException.

B. When you construct an instance of File, if the corresponding file does not exist on the local file system, one will be created.

C. When an instance of File is garbage collected, the corresponding file on the local file system is deleted.

D. None of the above.

None of the above.

13. Suppose class A extends Object; class B extends A; and class C extends B. Of these, only class C implements java.io.**Serializable**. Which of the following must be true in order to avoid an exception during deserialization of an instance of C?

A. A must have a no-args constructor.

B. B must have a no-args constructor.

C. C must have a no-args constructor.

D. There are no restrictions regarding no-args constructors.

B *must have a no-args constructor.*

---

14. Suppose class A extends Object; Class B extends A; and class C extends B. Of these, only class C implements java.io.**Externalizable**. Which of the following must be true in order to avoid an exception during deserialization of an instance of C?

A. A must have a no-args constructor.

B. B must have a no-args constructor.

C. C must have a no-args constructor.

D. There are no restrictions regarding no-args constructors.

C *must have a no-args constructor.*

5. Given a class with a public variable theTint of type Color, which of the following methods are consistent with the JavaBeans naming standards?

A. public Color getColor()

B. public Color getTint()

C. public Color getTheTint()

D. public Color gettheTint()

E. public Color get_theTint()

public Color **getTheTint()**

(hàm get trình biên dịch tạo)

---

6. Which of the following statements are true regarding the following method?

void callMe(String... names) { }

A. It doesn't compile.

B. Within the method, names is an array containing Strings.

C. Within the method, names is a list containing Strings.

D. The method may be called only from within the enclosing class.

Within the method, names is an array containing Strings.

Which statements are true?

A. The compiler creates a default constructor with public access.

B. The compiler creates a default constructor with protected access.

C. The compiler creates a default constructor with default access.

D. The compiler creates a default constructor with private access.

E. The compiler does not create a default constructor.

The compiler does not create a default constructor.

---

9. Which of the following types are legal arguments of a switch statement?

A. enums

B. bytes

C. longs

D. floats

E. strings

enums

 bytes

11. Which lines check that x is equal to four? Assume assertions are enabled at compile time and runtime.

A. assert x == 4;

B. assert x != 4;

C. assert x == 4 : "x is not 4";

D. assert x != 4 : "x is not 4";

assert x == 4;

assert x == 4 : "x is not 4";

Suppose you want to use a DateFormat to format an instance of Date. What factors influence the string returned by DateFormat's format() method?

A. The operating system

B. The style, which is one of SHORT, MEDIUM, or LONG

C. The style, which is one of SHORT, MEDIUM, LONG, or FULL

D. The locale

The style, which is one of **SHORT, MEDIUM, LONG, or FULL**

The locale

25. How do you generate a string representing the value of a float f in a format appropriate for a locale loc?

A. NumberFormat nf = NumberFormat.getInstance(loc);

String s = nf.format(f);

B. NumberFormat nf =

new NumberFormat(loc); String s = nf.format(f);

C. NumberFormat nf = NumberFormat.getInstance();

String s = nf.format(f, loc);

D. NumberFormat nf =

new NumberFormat(loc); String s = nf.format(f, loc);

NumberFormat nf = NumberFormat.getInstance(loc);

String s = nf.format(f);

What relationship does the extends keyword represent?

A. "is a"

B. "has a"

C. Polymorphism

D. Multivariance

E. Overloading

"is a"

Mối quan hệ mà từ khóa extends biểu thị là mối quan hệ "is a"

When should objects stored in a Set implement the java.util.Comparable interface?

A. Always

B. When the Set is generic

C. When the Set is a HashSet

D. When the Set is a TreeSet

E. Never

When the Set is a TreeSet

Give the following declarations: Vector plainVec; Vector<String> fancyVec;

If you want a vector in which you know you will only store strings, what are the advantages of using fancyVec rather than plainVec?

A. Attempting to add anything other than a string to fancyVec results in a compiler error.

B. Attempting to add anything other than a string to fancyVec causes a runtime exception to be thrown.

C. Attempting to add anything other than a string to fancyVec causes a checked exception to be thrown.

D. Adding a string to fancyVec takes less time than adding one to plainVec.

E. The methods of fancyVec are synchronized.

Attempting to add anything other than a string to fancyVec results in a compiler error.

The declaration of the java.util.Collection interface is

interface Collection <E>

The addAll() method of that interface takes a single argument, which is a reference to a collection whose elements are compatible with E. What is the declaration of the addAll() method?

A. public boolean addAll(Collection c)

B. public boolean

addAll(Collection c extends E)

C. public boolean

addAll(Collection ? extends E)

D. public boolean

addAll(Collection<? extends E> c)

D. public boolean

addAll(Collection<? extends E> c)

What is -15 % -10?

A. 0

B. 5

C. 10

D. -5

E. -1

-5

---

method is used to wait for a client to initiate communications.

a. wait()

b. accept()

c. listen()

accept()

A monitor called mon has 10 threads in its waiting pool; all these waiting

threads have the same priority. One of the threads is thr1. How can you notify thr1 so that it alone moves from the Waiting state to the Ready state? (Choose one.)

a. Execute notify(thr1); from within synchronized code of mon.

b. Execute mon.notify(thr1); from synchronized code of any object.

c. Execute thr1.notify(); from synchronized code of any object.

d. Execute thr1.notify(); from any code (synchronized or not) of any object.

e. You cannot specify which thread will get notified.

You cannot specify which thread will get notified.

A signed data type has an equal number of non-zero positive and negative

values available.

a. True

b. False

False

Kiểu dữ liệu signed có sẵn một số lượng các giá trị âm và dương khác 0 bằng nhau.

A thread wants to make a second thread ineligible for execution. To do

this, the first thread can call the yield() method on the second thread.

a. True

b. False

False

Một luồng muốn tạo một luồng thứ hai không đủ điều kiện để thực thi. Để thực hiện việc này, luồng đầu tiên có thể gọi phương thức yime () trên luồng thứ hai.

How can you ensure that multithreaded code does not deadlock? (Choose one.)

a. Synchronize access to all shared variables.

b. Make sure all threads yield from time to time.

c. Vary the priorities of your threads.

d. There is no single technique that can guarantee non-deadlocking code.

There is no single technique that can guarantee non-deadlocking code

---

An/A _____ declaration contains signatures, but no implementations, for a set of methods, and might also contain constant definitions.

A. class

B. object

C. data type

D. abstract class

E. interface

E

In the following code fragment, after execution of line 1, sbuf references

an instance of the StringBuffer class. After execution of line 2, sbuf still references the same instance.

1. StringBuffer sbuf = new StringBuffer("FPT");

2. sbuf.append("-University");

a. True

b. False

True

In the following code fragment, after execution of line 1, sbuf references

an instance of the StringBuffer class. After execution of line 2, sbuf still references the same instance.

1. StringBuffer sbuf = new StringBuffer("FPT");

2. sbuf.insert(3, "-University");

a. True

b. False

True

QN=97

(76) Is it possible to define a class called Thing so that the following method

can return true under certain circumstances?

boolean weird(Thing s) { Integer x = new Integer(5); return s.equals(x);

}

a. Yes

b. No

Yes

QN=98

(205) Is it possible to write code that can execute only if the current thread owns

multiple locks?

a. Yes

b. No

Yes

QN=100

(305) MVC is short call of

a. Model-View-Controller

b. Multiple-View-Controller

c. Metal-View-Controller

Model-View-Controller

Select correct statement(s) about remote class.(choose one)

a. It must extend java.rmi.server.UnicastRemoteObject.

b. It must implement the remote interface.

c. It is the class whose methods provide services to clients.

d. All the others choices

All the others choices

Select correct statements about remote interface. (choose 1)

a. A remote interface is an interface that describes the remotely accessible methods of a remote object.

b. All remote interfaces must extend java.rmi.Remote.

c. All methods in a remote interface must throw java.rmi.RemoteException

d. The type of a remote reference is a remote interface

e. All the others choices

Select INCORRECT statement about deserialize. (choose 1)

a. Any JVM that tries to deserialize an object must have access to that

object's class definition.

b. We use readObject() method of ObjectOutputStream class to deserialize.

c. The readObject method deserializes the next object in the stream and

traverses its references to other objects recursively to deserialize all objects that are reachable from it.

We use readObject() method of ObjectOutputStream class to deserialize.

Suppose a source file contains a large number of import statements and one

class definition. How do the imports affect the time required to load the class? (Choose one.)

a. Class loading takes no additional time.

b. Class loading takes slightly more time.

c. Class loading takes significantly more time.

Class loading takes no additional time.

Suppose the type of xarr is an array of XXX, and the type of yarr is an

array of YYY. When is the assignment xarr = yarr; legal? (Choose one.)

a. Sometimes

b. Always

c. Never

d. None of the others choices

Sometimes

Suppose you are writing a class that will provide custom deserialization.

The class implements java.io.Serializable (not java.io.Externalizable). What access mode should the readObject() method have? (Choose one.)

a. public

b. protected

c. default

d. private

private

Suppose you are writing a class that will provide custom serialization. The

class implements java.io.Serializable (not java.io.Externalizable). What access mode should the writeObject() method have? (Choose one.)

a. public

b. protected

c. default

d. private

private

Suppose you want to create a custom thread class by extending

java.lang.Thread in order to provide some special functionality. Which of the following must you do? (Choose one.)

a. Declare that your class implements java.lang.Runnable.

b. Override run().

c. Override start().

d. Make sure that all access to all data is via synchronized methods.

Override run().

The class is the primary class that has the driver information.

a. DriverManager

b. Driver

c. ODBCDriver

d. None of the others

DriverManager

The element method alters the contents of a Queue.

a. True

b. False

False

Phương thức element thay đổi nội dung của Hàng đợi.

There are two classes in Java to enable communication using datagrams namely.

a. DataPacket and DataSocket

b. DatagramPacket and DatagramSocket

c. DatagramPack and DatagramSock

DataPacket and DataSocket

What is **-50 >> 2**

a. A negative number with very large magnitude.

b. A positive number with very large magnitude.

c. -13

d. -25

e. 13

f. 25

-13

What is the range of values that can be assigned to a variable of type **byte**?

(Choose one.)

a. Depends on the underlying hardware

b. 0 through $2^8 - 1$

c. 0 through $2^{16} - 1$

d. -2^7 through $2^7 - 1$

e. -2^{15} through $2^{15} - 1$

-2^7 through $2^7 - 1$

What is the range of values that can be assigned to a variable of type **short**?

(Choose one.)

a. Depends on the underlying hardware

b. 0 through $2^{16} - 1$

c. 0 through $2^{32} - 1$

d. -2^{15} through $2^{15} - 1$

e. -2^{31} through $2^{31} - 1$

-2^{15} through $2^{15} - 1$

When a **byte is added to a char**, what is the type of the result?

a. byte

b. char

c. int

d. short

e. You can't add a byte to a char.

int

When a short is added to a float, what is the type of the result?

a. short

b. int

c. float

d. You can't add a short to a float.

float

When comparing java.io.BufferedWriter to java.io.FileWriter, which capability exists as a method in only one of the two? (Choose one.)

a. closing the stream

b. flushing the stream

c. writing to the stream

d. marking a location in the stream

e. writing a line separator to the stream

writing a line separator to the stream

Which of the following are legal **loop definitions**? (Choose one.)

a. while (int a = 0) { /* whatever */ }

b. while (int a == 0) { /* whatever */ }

c. do { /* whatever */ } while (int a = 0)

d. do { /* whatever */ } while (int a == 0)

e. for (int a==0; a<100; a++) { /* whatever */ }

f. None of the above.

None of the above.

Which of the following are legal? (Choose two.)

a. double d = 1.2d;

b. double d = 1.2D;

c. double d = 1.2d5;

d. double d = 1.2D5;

double d = 1.2d;

double d = 1.2D;

Which of the following are legal? (Choose two.)

a. int a = abcd;

b. int b = ABCD;

c. int c = 0xabcd;

d. int d = 0XABCD;

e. int f = 0ABCD;

int c = 0xabcd;

 int d = 0XABCD;

Which of the following are methods of the **java.util.SortedSet** interface?
(Choose one.)

a. first

b. last

c. headSet

d. tailSet

e. subSet

f. All the above

All the above

Which of the following are true? (Choose one.)

a. System.out has a println() method.

b. System.out has a format() method.

c. System.err has a println() method.

d. System.err has a format () method.

e. All the above

All the above

Which of the following are true? (Choose two.)

a. An enum definition should declare that it extends java.lang.Enum.

b. An enum may be subclassed.

c. An enum may contain public method definitions.
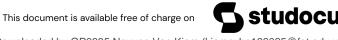
d. An enum may contain private data.

An enum may contain **public method definitions.**

An enum may contain **private data.**

Which of the following are valid arguments to the **DataInputStream** constructor? (Choose one.)

a. File

b. FileReader

c. FileInputStream

d. RandomAccessFile

FileInputStream

Which of the following are valid mode strings for the RandomAccessFile constructor? (Choose one.)

a. "r"

b. "rw"

c. "rws"

d. "rwd"

e. All the above

All the above

Which of the following calls may be made from a non-static synchronized method? (Choose one.)

a. A call to the same method of the current object.

b. A call to the same method of a different instance of the current class.

c. A call to a different synchronized method of the current object.

d. A call to a static synchronized method of the current class.

e. All the above

All the above

Which of the following classes implement java.util.List? (Choose two.)

a. java.util.ArrayList

b. java.util.HashMap

c. java.util.TreeSet

d. java.util.Stack

java.util.ArrayList

java.util.Stack

Which of the following classes implements a **FIFO Queue**? (Choose one.)

a. HashSet

b. LinkedList

c. PriorityQueue

d. CopyOnWriteArraySet

LinkedList

Which of the following interfaces does **not allow duplicate** objects?

(Choose one.)

a. Queue

b. Set

c. List

Set

Which of the following is not appropriate situations for **assertions**?

(Câu lệnh Assertion trong Java giúp phát hiện lỗi bằng cách kiểm tra đoạn mã mà người lập trình cho là đúng.)

(Choose one)

a. Preconditions of a public method

b. Postconditions of a public method

c. Preconditions of a private method

d. Postconditions of a private method

Preconditions of a public method

Điều kiện tiên quyết của một public method

Which of the following is NOT a valid comment:

a. /*** comment **/

b. /** comment **/

c. /* comment

d. // comment

/* comment

Which of the following is the most appropriate way to handle invalid arguments in a public method?

a. Throw java.lang.InvalidArgumentException.

b. Throw java.lang.IllegalArgumentException.

c. Check for argument validity in an assert statement, which throws AssertionError when the arguments are invalid.

d. Use non-assert code to check for argument validity. If invalid arguments

are detected, explicitly throw AssertionError.

Throw java.lang.IllegalArgumentException.

(illegal)

Which of the following is true? (Choose one.)

a. Readers have methods that can read and return floats and doubles.

b. Readers have methods that can read and return floats.

c. Readers have methods that can read and return doubles.

d. Readers have methods that can read and return ints.

e. None of the above

None of the above

Readers and Writers only deal with character I/O

Which of the following is(are) true? (Choose one.)

a. An enum definition may contain the main() method of an application.

b. You can call an enum's toString() method.

c. You can call an enum's wait() method.

d. You can call an enum's notify() method.

e. All the above

All the above

A. Định nghĩa enum có thể chứa phương thức main () của một ứng dụng.

B. Bạn có thể gọi một phương thức toString () của enum.

C. Bạn có thể gọi một phương thức enum's wait ().

D. Bạn có thể gọi một phương thức enum's Inform ().

Which of the statements below are true? (Choose one.)

a. To change the current working directory, call the setWorkingDirectory() method of the File class.

b. To change the current working directory, call the cd() method of the File class.

c. To change the current working directory, call the changeWorkingDirectory() method of the File class.

d. None of the above

None of the above

What is the legal type for x so that the line 2 compler?

1. short s = 10;

2. x = !s;

A. short

B. int

C. There is no possible legal type.

D. long

E. Boolean

C