浙大17秋JAD期末考试模拟试卷

100 分

I. 判断题	共 10 小题，共计 10 分
II. 单选题	共 30 小题，共计 60 分
III. 填空题	共 10 小题，共计 30 分

剩余时间: 已结束

判断题 单选题 填空题

1-1

作者: 翁恺
单位: 浙江大学

`InputStream` and `OutputStream` are root classes for all stream classes. (1分)

◉ T ○ F

1-2

作者: 翁恺
单位: 浙江大学

Once the layout of a container has been set, there is no chance to change it to another layout manager. (1分)

○ T ◉ F

1-3

作者: 翁恺
单位: 浙江大学

`protected` can be used to prevent methods and data been accessed from non-derived classes. (1分)

○ T ◉ F

1-4

判断题

1 2 3
4 5 6
7 8 9
10

单选题

1 2 3
4 5 6
7 8 9
10 11 12
13 14 15
16 17 18
19 20 21
22 23 24
25 26 27
28 29 30

填空题

1-4

作者: 翁恺
单位: 浙江大学

There is a `length()` method for all the arrays to represent the number of elements (1分)

○ T ◉ F

1-5

作者: 翁恺
单位: 浙江大学

Objects created in JAVA do not need to be deleted or freed by the programmer. (1分)

○ T ◉ F

1-6

作者: 翁恺
单位: 浙江大学

Using `BorderLayout`, the order to add components is irrelevant. (1分)

○ T ◉ F

1-7

作者: 翁恺
单位: 浙江大学

Using `import` to import all classes in a package may slow down the compilation but has no effect on the run-time performance. (1分)

○ T ◉ F

1-8

作者: 翁恺
单位: 浙江大学

All methods in an abstract superclass must be declared abstract in its derived class. (1分)

○ T ◉ F

1-9

作者: 翁恺
单位: 浙江大学

All methods in Java use run-time dynamic binding. (1分)

1 2 3
4 5 6
7 8 9
10

○ T ◉ F

1-10

作者: 翁恺
单位: 浙江大学

Some Java objects are put in the heap, while some are in stack. (1分)

◉ T ○ F

PTA 程序设计类实验辅助教学平台 Programming Teaching Assistant

zju3150105239

题目列表

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判断题 | 单选题 | 填空题

2-1

作者: 翁恺
单位: 浙江大学

Which one below is correct to define and create an array? ( ) (2分)

○ A. int a[5];
○ B. int a[] = new [5];
◉ C. int a[] = {1,2,3,4,5};
○ D. int a = new int[5];

2-2

作者: 翁恺
单位: 浙江大学

Given the following expression: `int m[] = {0, 1, 2, 3, 4, 5, 6`

判断题

1 2 3
4 5 6
7 8 9
10

单选题

1 2 3
4 5 6
7 8 9
10 11 12
13 14 15

```
};
```

Which result of the following expressions equals to the number of the array elements? ( ) (2分)

- A. m.length()
- B. m.length
- C. m.length()+1
- D. m.length+1

2-3

作者: 翁恺
单位: 浙江大学

9. Given `a=new int[10]`, which expression below can cause `ArrayIndexOutOfBoundsException`? (2分)

- A. `a[0] += 9;`
- B. `a[9]=10;`
- C. `a[9]`
- D. `for(int i=0;i<=10;i++) a[i]++;`

2-4

作者: 翁恺
单位: 浙江大学

What will happen to access an invalid index of an array? (2分)

- A. Program terminated.
- B. Exception thrown.
- C. System crashed.
- D. Access ignored.

2-5

作者: 翁恺
单位: 浙江大学

How much time is a thread to get the CPU back after calling sleep(1000),suppose the thread will not be interrupted during the sleep?( ) (2分)

- A. Right 1000ms
- B. Less than 1000ms
- C. >=1000ms
- D. May great than or less than 1000ms

2-6

作者: 翁恺
单位: 浙江大学

Which method below can change the priority of a thread? (2分)

- A. run()
- B. setPriority()

16 17 18
19 20 21
22 23 24
25 26 27
28 29 30

填空题

1 2 3
4 5 6
7 8 9
10

C. yield()
D. sleep()

2-7

作者: 翁恺
单位: 浙江大学

Which of the following best describes the use of the synchronized keyword? (2分)

A. Allows two process to run in parallel but to communicate with each other
B. Ensures only one thread at a time may access a method or object
C. Ensures that two or more processes will start and end at the same time
D. Ensures that two or more Threads will start and end at the same time

2-8

作者: 翁恺
单位: 浙江大学

Which one below is defined by the Runnable interface? (2分)

A. sleep();
B. start();
C. wait();
D. run();

2-9

作者: 翁恺
单位: 浙江大学

`wait()` and `notify()` are used to suspend and resume threads. They are defined as methods of: (2分)

A. Thread
B. Runnable
C. Synchronized
D. Object

2-10

作者: 翁恺
单位: 浙江大学

About AWT and Swing, which statement below is correct? (2分)

A. Swing is a subset of AWT.
B. AWT displays the same among different platforms.
C. Both AWT and Swing support listener event model.
D. Swing can display the same among different platforms.

2-11

作者: 翁恺
单位: 浙江大学

How do you indicate where a component will be positioned using Flowlayout? (2分)

- A. North, South,East,West
- B. Assign a row/column grid reference
- C. Pass a X/Y percentage parameter to the add method
- D. Do nothing, the FlowLayout will position the component

2-12

作者: 翁恺
单位: 浙江大学

Which method below is to be executed only once during a lifecycle of an Applet (2分)

- A. init()
- B. paint()
- C. run()
- D. repaint()

2-13

作者: 翁恺
单位: 浙江大学

Which one below is true about the StringBuffer class? (2分)

- A. An object of StringBuffer has a fixed size.
- B. StringBuffer inherits all the methods from String.
- C. An object of StringBuffer can be initialized using the = operator.
- D. StringBuffer has append() method to form a larger string.

2-14

作者: 翁恺
单位: 浙江大学

Which of the following statement is true? (2分)

- A. The equals() method of any class determines if reference values refer to the same object.
- B. The == operator determines if the contents and type of two separate objects match.
- C. The equals() method of any class returns true only when the contents of two objects match.
- D. The class File overrides equals() to return true if the contents and type of two separate objects match.

2-15

2-15

作者: 翁恺
单位: 浙江大学

Which of the following statements is **NOT** true? (2分)

- A. `Strings` can be initialized using the = operator with a string literal value.
- B. The `toString()` method can be used to return a String value from an object of any class.
- C. All strings are terminated with a `null` ('\0') character.
- D. It is impossible to change the contents of a `String` object.

2-16

作者: 翁恺
单位: 浙江大学

What will be output by the following line?(2分)

```
System.out.println(Math.floor(-2.1));
```

- A. -2
- B. 2.0
- C. -3
- D. -3.0

2-17

作者: 翁恺
单位: 浙江大学

Which of the following will output -3.0 (2分)

- A. System.out.println(Math.floor(-3.7));
- B. System.out.println(Math.round(-3.7));
- C. System.out.println(Math.ceil(-3.7));
- D. System.out.println(Math.min(-3.7));

2-18

作者: 翁恺
单位: 浙江大学

Given code below:

```
class Value {
        int i;
}
public class Test {
        public static void main(String[] argv) {
                Integer v1 = 39;
                Integer v2 = 39;
                System.out.println(v1.equals(v2));
        }
```

```
}
```

Which of the following statement is true? (2分)

- A. It does not compile because of line 6 and 7, that the type are not match for assignment operator.
- B. It compiles and print out “true”.
- C. It compiles and print out “false”.
- D. It compiles but exception raises for line 6 at run time: type mismatch.

2-19

作者: 翁恺
单位: 浙江大学

About classes in Java, which one below is correct? (2分)

- A. There is no root class in Java.
- B. Every Java class is derived from the root class Root.
- C. Every Java class is derived from the root class Object.
- D. Every Java class is derived from the root class Class.

2-20

作者: 翁恺
单位: 浙江大学

For code below, which statement is NOT correct? (2分)

```
import static haha.Haha.*;
        …
public class Lala {
public void mian(String[] args) {
                        …
                        take(args);
                        …
        }
}
```

- A. take() is a global function
- B. take() is a non-static member of Lala
- C. take() is a static member of Lala
- D. take() is a static member of Haha

2-21

作者: 翁恺
单位: 浙江大学

About the Java language, which statement below is correct? (2分)

- A. All methods in an abstract superclass must be declared abstract.
- B. A class declared final cannot be instantiated.
- C. A redefinition of a superclass method in a subclass need not have the same signature as the superclass

need not have the same signature as the superclass method. Such a redefinition is not method overriding but is simply an example of method overloading.

- (●) D. A constructor is a special method with the same name as the class that is used to initialize the members of a class object. Constructors are called when objects of their classes are instantiated.

2-22

作者: 翁恺
单位: 浙江大学

Given a public member variable `MAX_LENGTH` as the `int` type is a constant of 100, the correct statement to define the variable is: (2分)

- ( ) A. public int MAX_LENGTH=100
- ( ) B. final int MAX_LENGTH=100
- ( ) C. public const int MAX_LENGTH=100
- (●) D. public final int MAX_LENGTH=100

2-23

作者: 翁恺
单位: 浙江大学

For a class defined inside a method, what rule governs access to the variables of the enclosing method? (2分)

- ( ) 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

2-24

作者: 翁恺
单位: 浙江大学

What is the result of attempting to compile and run the following program? (2分)

```
public class Test {
        private int i = j;
        private int j = 10;
        public static void main(String args[]) {
                System.out.println((new Test()).i);
        }
}
```

- ( ) A. Compiler error complaining about access restriction of private variables of Test.
- (●) B. Compiler error complaining about forward referencing.
- ( ) C. No error - The output is 0;
- ( ) D. No error - The output is 10;

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剩余时间: 已结束

判断题 单选题 填空题

4-1

作者: 翁恺
单位: 浙江大学

请写出以下程序运行结果：

```
//环境 JDK 1.5及以上
public static void main(String args[])
   {
       Set<Integer> set=new TreeSet<Integer>();
       List<Integer> list=new ArrayList<Integer>();
       for (int i=-3;i<3;i++)
       {
               set.add(i);
               list.add(i);
       }
       for (int i=0;i<3;i++)
       {
               set.remove(i);
               list.remove(i);
       }
       System.out.println(set+" "+list);

   }
```

程序运行的输出结果为 [-3, -2, -1] [-2, 0, 2] (3分)

4-2

作者: 翁恺
单位: 浙江大学

判断题
1 2 3 4
5 6 7 8
9 10

单选题
1 2 3 4
5 6 7 8
9 10 11 12
13 14 15 16
17 18 19 20
21 22 23 24
25 26 27 28
29 30

填空题
1 2 3 4
5 6 7 8
9 10

单位: 浙江大学

给出以下代码：

```
public class Main {
        public static void main(String[] args) {
                String s = "hello";
                try {
                        s = s+" world ";
                        s.toUpperCase();
                        s.trim();
                        if ( s.length() <12 ) {
                                throw new Exception();
                        }
                } catch (Exception e) {
                        System.out.print(s);
                } finally {
                        System.out.print(s);
                }
        }
}
```

程序运行结果是：hello world (3分)

4-3

作者: 翁恺
单位: 浙江大学

请写出以下程序运行结果：

```
class Main  {
        public static void main(String[] args) {
                String s1 = "Zhejiang University";
                String s2 = s1.substring(0, 7);
                s2.toUpperCase();
                System.out.println(s2+s1.substring(8));
        }
}
```

Zhejian University (3分)

4-4

作者: 翁恺
单位: 浙江大学

请写出以下程序运行结果：

```
class Foo {
        protected class Bar {
                protected Bar() { System.out.println("Foo.Bar"); }
        }
        private Bar b;
        Foo() {
                System.out.println("Foo");
                b = this.new Bar();
        }
}
```

```
class FooToo extends Foo  {
        protected class Bar {
                protected Bar() { System.out.println("FootToo.Bar"); }
        }
        public static void main(String[] args) {
                new FooToo();
        }
}
```

Foo (1分)

Foo.Bar (2分)

4-5

作者: 翁恺
单位: 浙江大学

The code below will print three lines.

```
class Pet {}
class Dog extends Pet {}
class Pug extends Dog {}
class Cat extends Pet {}
class Rodent extends Pet {}
class Gerbil extends Rodent {}
class Hamster extends Rodent {}

class Main {
        static HashMap<Integer, Class<? extends Pet>> map = new HashMap<Integer, Class<? extends Pet>>();
        static {
                map.put(Pet.class.getName().length(), Pet.class);
                map.put(Dog.class.getName().length(), Dog.class);
                map.put(Pug.class.getName().length(), Pug.class);
                map.put(Cat.class.getName().length(), Cat.class);
                map.put(Rodent.class.getName().length(), Rodent.class);
                map.put(Gerbil.class.getName().length(), Gerbil.class);
                map.put(Hamster.class.getName().length(), Hamster.class);
        }
        public static void main(String[] args) {
                for ( Integer i : map.keySet() )
                        System.out.println(map.get(i).getName());
}}
```

1. Cat (1分)
2. Gerbil (1分)
3. Hamster (1分)

4-6

作者: 翁恺
单位: 浙江大学

请写出以下程序运行结果：

```
class Test {
    public static void main(String[] args) {
```

```
        Integer a = new Integer(3);
        Integer b = 3;
        int c = 3;
        System.out.println(a == b);
        System.out.println(a == c);
}}
```

false (1分)

true (2分)

4-7

作者: 翁恺
单位: 浙江大学

请写出以下程序运行结果：

```
class Exception1  extends Exception {}
class Exception2  extends Exception1  {}
public class Test {
   public static void main(String[] args)
      throws Exception {
      try {
         try {
             throw new Exception2();
         } catch ( Exception1  a ) {
             System.out.println("Caught Exception1");
             throw a;
         }
      } catch ( Exception2 s ) {
         System.out.println("Caught Exception2");
         return ;
      } finally {
         System.out.println("Hello World!");
}}}
```

Caught Exception1 (1分)

Caught Exception2 (1分)

Hello World! (1分)

4-8

作者: 翁恺
单位: 浙江大学

请写出以下程序运行结果：

```
public class Q {
        public static void main(String[] arg) {
                int anar[] = new int[]{1,2,3};
                System.out.println(anar[1]);
        }
}
```

2 (3分)

4-9

作者: 翁恺
单位: 浙江大学

给出以下代码：

```
public class Main {
        int i=2;
        class A {
                int k = i;
                void f() { k=k+i; }
        }
        void f() {
                A a = new A();
                for ( i=0; i<10; i++ )
                        a.f();
                System.out.println(a.k);
        }
        public static void main(String[] args) {
                Main m = new Main();
                m.f();
        }
}
```

程序运行结果是：47 (3分)

4-10

作者: 翁恺
单位: 浙江大学

For code below:

```
Loop1:
while ( true ) {                        //      1
        for ( ; true; ) {
                if ( i ==2 )
                        break Loop1;    //      2
        }
        i=4;                            //      3
}
i=5;                                    //      4
```

After executing line 2, where will the program jump to?

4 (3分)

保存

第二份

判断题 单选题 填空题

1-1 If constructor of class A is made private, classes within the same package as class A can instantiate objects of class A. (1分)

作者: 鲁伟明
单位: 浙江大学

- ○ T
- ◉ F

1-2 Abstract class should include at least one abstract method. (1分)

作者: 鲁伟明
单位: 浙江大学

- ○ T
- ◉ F

1-3 `JLabel` can contain other components. (1分)

作者: 鲁伟明
单位: 浙江大学

- ◉ T
- ○ F

1-4 We can use `array.length()` to get array's length. (1分)

作者: 鲁伟明
单位: 浙江大学

- ○ T
- ◉ F

1-5 A thread object has a method called notify(). (1分)

作者: 鲁伟明
单位: 浙江大学

- ◉ T
- ○ F

1-6 Using `JPanel p = new JPanel(); BoxLayout bl = new BoxLayout(p, BoxLayout.X_AXIS);` does not set the BoxLayout for Panel p. (1分)

作者: 鲁伟明
单位: 浙江大学

- ○ T
- ◉ F

1-7 `FileOutputStream` can only write bytes directly to a file. (1分)

作者: 鲁伟明
单位: 浙江大学

- ○ T
- ◉ F

1-8 A local class or anonymous class can access all local variables from the enclosing method. (1分)

作者: 鲁伟明
单位: 浙江大学

- ◉ T
- ○ F

1-9 A static method can refer to "this" or "super" keywords in some way. (1分)

作者: 鲁伟明
单位: 浙江大学

- ○ T
- ◉ F

1-10 For `final int[] ar = new int[10];` we can modify the content of the array. (1分)

作者: 鲁伟明
单位: 浙江大学

- ◉ T
- ○ F

2-1 What is the output of this program? (2分)

剩余时间: 已结束

作者: 鲁伟明
单位: 浙江大学

```
public class Output
{
    public static void main(String args[])
    {
        Integer i = new Integer(256);
        byte x = i.byteValue();
        System.out.print(x);
    }
}
```

- ◉ A. 0
- ○ B. 1
- ○ C. 256
- ○ D. 257

2-2 What is the output of this program?(2分)

作者: 鲁伟明
单位: 浙江大学

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

- ○ A. JHelloava
- ○ B. JHello
- ◉ C. JHelloa
- ○ D. Java

2-3 Given code below:

作者: 翁恺
单位: 浙江大学

```
package his;
public class My {
       void f() {};
}
```

Which statement below is NOT correct? (2分)

- ○ A. It has to be in a directory named his.
- ◉ B. The f() function is default to private.
- ○ C. Only methods of classes in package his can access the f() function.
- ○ D. It has to be in a file named My.java.

2-4 Which one below is NOT a valid Java identifier? (2分)

剩余时间: 已结束

作者: 翁恺
单位: 浙江大学

- ○ A. 名字
- ○ B. Double
- ◉ C. const
- ○ D. $2

2-5 Given the following code:

作者: 翁恺
单位: 浙江大学

```
class Background extends Thread {
    public void run(){
        while(true){
            System.out.println("hello");
        }
        return 0;
    }
    public static void main(String[] args) {
        new Thread(new Background()).start();
    }
}
```

What will happen when you attempt to compile and run the code?(2分)

- A. It compiles and prints out nothing.
- B. It does not compile because of the function signature of run()
- C. It compiles and prints out "hello" repeatedly
- D. It does not compile because of the expression inside main()

2-6 Which component is responsible for converting byte code into machine specific code? (2分)

作者: 鲁伟明
单位: 浙江大学

- A. JDK
- B. JRE
- C. JVM
- D. JIT

2-7 Given code below:

作者: 翁恺
单位: 浙江大学

```
List<Double> ls = new ArrayList<Double>();
List<?> lo = ls;
lo.add(new Object());
String s = ls.get(0);
```

Which statement below is correct? (2分)

- A. It does not compile
- B. It compiles but exception raises at line 2
- C. It compiles but exception raises at line 3
- D. It compiles but exception raises at line 4

2-8 For code below, the result would be printed? (2分)

剩余时间: 已结束

作者: 楼学庆
单位: 浙江大学

```
String s1 = new String("hello");
String s2 = new String("hello");
System.out.println(s1 == s2);
String t1 = "hello";
String t2 = "hello";
System.out.println(t1 == t2);
```

- A. true, false
- B. false, true
- C. true, true
- D. false,false

2-9 `synchonize` needs a "lock" object. Object of which class can be used as that lock? (2分)

作者: 翁恺
单位: 浙江大学

- A. Lock
- B. Object
- C. Thread
- D. Synchronized

2-10 What is the output of below snippet? (2分)

作者: 鲁伟明
单位: 浙江大学

```
Object[] names = new Integer[3];
names[0] = new Long(0);
```

- A. ArrayStoreException
- B. Compilation Error
- C. Code runs successfully
- D. ArrayIndexOutOfBoundsException

2-11 What is the output of the following code? (2分)

作者: 鲁伟明
单位: 浙江大学

```
public class Test {
        public static void main(String[]args){
                LinkedList list = new LinkedList<Integer>();
                for(int i=-4;i<4;i++){
                        list.add(i);
                }
                for(int i=0;i<4;i++){
                        list.remove(i);
                }
                System.out.println(list);
        }
}
```

- A. [-3,-1,1,3]
- B. [0,1,2,3]
- C. [-2,-1,1,2]
- D. [-4,-3,-2,-1]

2-12 for code below:(2分)

剩余时间: 已结束

作者: 楼学庆
单位: 浙江大学

```
int x=0x80000000;
if (x==-x)
        System.out.println("OK");
else
```

```
        System.out.println("NOT");
```

It prints:

- (●) A. NOT
- ( ) B. OK
- ( ) C. overflow
- ( ) D. error (compilation or run-time)

2-13 For object `o` and class `C`, which expression below is the right way to test if `o` is an object of `C`? (2分)

作者: 翁恺
单位: 浙江大学

- ( ) A. `C.isInstance(o)`
- ( ) B. `o.getClass() == C`
- ( ) C. `o.class == C`
- (●) D. `o instanceof C`

2-14 The program needs a Thread, (__) is the one.。(2分)

作者: 楼学庆
单位: 浙江大学

```
class Hello2016
{       public static void main(String[] args)
        {
                (__//put the best here__);
        }
}
```

- ( ) A. new Thread(run()-> System.out.println("Hi,2017")).start();
- ( ) B. new Runnable(run()-> System.out.println("Hi,2017")).start();
- (●) C. new Thread(()-> System.out.println("Hi,2017")).start();
- ( ) D. new Runnable(()-> System.out.println("Hi,2017")).start();

2-15 implements ActionListener needs a function, (__) is the one.。(2分)

作者: 楼学庆
单位: 浙江大学

```
class Hello2016 implements ActionListener
{       public static void main(String[] args)
        {       ... ... ...
        }
        (__//put the best here__);
}
```

- ( ) A. public void mouseClicked(MouseEvent e){... ... ...}
- ( ) B. public void mousePressed(MouseEvent e){... ... ...}
- (●) C. public void actionPerformed(ActionEvent e){... ... ...}
- ( ) D. public void update(Observable o, Object rectangle){... ... ...}

2-16 Choose the best fill in the blanks。(2分)

剩余时间: 已结束

作者: 楼学庆
单位: 浙江大学

```
class Hello2017
{       public static void main(String[] args)
        {
                (__//put the best here__);
        }
}
class Century extends Thread
{       String m=”Hello”;
        Century(String m){
                this.m=m;
        }
        public void run() {
                System.out.println(m);
        }
}
```

- ( ) A. new Thread(new Century()).start();
- (●) B. new Century("Hello").start();
- ( ) C. new Thread("Hello").start();
- ( ) D. new Century(new Thread()).start();

2-17 About inner class, which statement below is NOT correct? (2分)

作者: 翁恺
单位: 浙江大学

- ( ) A. Non-static member inner class can not be used in the static functions.
- (●) B. Inner classes defined inside a function can access any local variables in that function.
- ( ) C. Inner class can access every member of the outer class.
- ( ) D. Inner class cannot be defined as private.

2-18 which one below is the correct signature of `InputStream.read()`? (2分)

作者: 翁恺
单位: 浙江大学

- (●) A. `int read()`
- ( ) B. `byte read()`
- ( ) C. `char read()`
- ( ) D. `long read()`

2-19 For code below:

作者: 翁恺
单位: 浙江大学

```
ArrayList<String> a = new ArrayList<>();
ArrayList<Double> b = new ArrayList<>();
```

Which statement below is NOT correct? (2分)

- ( ) A. It compiles
- ( ) B. `a.getClass() == b.getClass()` is true
- ( ) C. `a instanceof ArrayList` is true
- (●) D. `a.getClass() == b.getClass()` is false

2-20 About String in Java, which statement below is NOT correct? (2分)

剩余时间: 已结束

作者: 翁恺
单位: 浙江大学

- (●) A. A String object can be altered using the = operator with a string literal.
- ( ) B. A String object is immutable.
- ( ) C. A String object can be initialized using the = operator with a string literal.

D. Class Object defines toString() function to generate a String represents the object.

2-21 What is the output of this program? (2分)

作者: 鲁伟明
单位: 浙江大学

```
public class Test {
  public static void main(String[] args) throws Exception{
  String str = "ZJU2018";
  Method m = str.getClass().getMethod("toLowerCase");
  m.invoke(str);
  System.out.println(str);
 }
}
```

A. zju2018
B. ZJU2018
C. compilation error
D. runtime error

2-22 Which one below is true about the StringBuffer class? (2分)

作者: 翁恺
单位: 浙江大学

A. StringBuffer is derived from String.
B. An object of StringBuffer is imutable.
C. An object of StringBuffer can be initialized with a string literal.
D. StringBuffer has append() method to form a larger string.

2-23 For code below:(2分)

作者: 楼学庆
单位: 浙江大学

```
try{
                throw new B();
        } catch(B b){ System.out.println("Exception B");
        } catch(A a){ System.out.println("Exception A");
        }
……
class A extends Exception
{}
class B extends A
{}
```

执行以上代码将显示：(__)。

A. Exception B
B. Compile error
C. compile but exception raises at run-time
D. Exception A

2-24 What best describes the appearance of an application with the following code? (2分)

剩余时间: 已结束

作者: 翁恺
单位: 浙江大学

```
public class App extends JFrame{
        public static void main(String argv[]){
                App app=new App();
                app.pack();
                app.setVisible(true);
        }
        App(){
                add(new JButton("One"));
                add(new JButton("Two"));
                add(new JButton("Three"));
                add(new JButton("Four"));
        }
}
```

A. A frame with buttons marked One to Four placed at each edge
B. A frame with buttons marked One to Four placed one by one
C. A frame with one large button marked Four in the Centre
D. A frame with buttons marked One to Four placed in grids

2-25 Which one below generates a random number in [0,50)? (2分)

作者: 楼学庆
单位: 浙江大学

A. x=(int)(51*Math.random());
B. x=(int)(50*Math.random())+1;
C. x=(int)(50*Math.random());
D. x=(int)(51*Math.random())+1;

2-26 What is the output of this program?(2分)

作者: 楼学庆
单位: 浙江大学

```
public class Hello2017
{
        public static void main (String args [])
        {
                boolean b1 = true;
                if((b1==true) && place(false)){
                        System .out .println ("Hello01");
                }
                System .out .println ("HelloWorld");
        }
        public static boolean place (Boolean location)
        {
                if(location = true)System.out.println("Hello02");
                if(location == true)System.out.println("Hello03");
                return location;
        }
}
```

A. Hello01, HelloWorld.
B. Hello02, Hello01, HelloWorld.
C. Hello02, Hello03, Hello01, HelloWorld.
D. HelloWorld.

2-27 Which of these methods will make a thread leave the running state, and the method is not static?(2分)

作者: 鲁伟明
单位: 浙江大学

A. notify()
B. Thread.killThread()
C. yield()
D. wait()

2-28 Which statement below is NOT correct? (2分)

作者: 翁恺
单位: 浙江大学

A. A thread is a single execution flow of a program.
B. Multi-thread means multiple execution flow of one program.
C. A thread is the program itself.
D. Multi-thread is a way of concurrence.

2-29 Which of the following is NOT correct? (2分)

作者: 鲁伟明
单位: 浙江大学

A. Generic Array Creation is Not Allowed. (i.e., new E[100]).
B. Exception Classes Can be Generic.
C. Cannot Create an Instance of a Generic Type. (i.e., new E()).
D. A Generic Type Parameter of a Class Is Not Allowed in a Static Context

2-30 Which of the following declares an array that can support three rows and a variable number of columns? (2分)

作者: 鲁伟明
单位: 浙江大学

A. int myArray[][] = new int[3][];
B. int myArray[][] = new int[3][3];
C. int myArray[][] = new int[][];
D. int myArray[][] = new int[][3];

4-1 What will this code output?

剩余时间: 已结束

作者: 鲁伟明
单位: 浙江大学

```
public static void main(String[] args) {
                        String s1 = "ZJU";
                        String s2 = new String("ZJ") + new String("U");
                        String s3 = String.valueOf("ZJU");
                        String s4 = s2.intern();

                        System.out.println(s1==s2);  //1
                        System.out.println(s1==s3);  //2
                        System.out.println(s1==s4);  //3
}
```

The output of //1 is: false (1分)

The output of //2 is: false (1分)

The output of //3 is: false (1分)

4-2 For code below, the output should be: CDE (3分)

作者: 翁恺
单位: 浙江大学

```
        static class ME extends Exception{}
        static void f() throws Exception {
                throw new ME();
        }
        public static void main(String[] args) {
                try {
                        f();
                        System.out.print("A");
                } catch (RuntimeException ex) {
                        System.out.print("B");
                } catch (Exception ex1) {
                        System.out.print("C");
                } finally {
                        System.out.print("D");
                }
                System.out.print("E");
        }
```

4-3 What will this code output?

剩余时间: 已结束

作者: 鲁伟明
单位: 浙江大学

```
class M{
        void f(M m){
          System.out.println("in M.f");
        }
        void g(M m){
          System.out.println("in M.g");
        }
     }
     class C extends M{
        void f(C c){
          System.out.println("in C.f");
        }
        void g(M c){
          System.out.println("in C.g");
        }
     }
     class H extends C{
         void f(H h){
           System.out.println("in H.f");
         }
         void g(M h){
           System.out.println("in H.g");
         }
     }
     public class T{
       public static void main(String[] args){
         M h = new H();
         C c = new H();
         c.g(h);   //1
         h.f(c);     //2
       }
     }
```

```
}
```

The output of //1 is: in H.g (1分) The output of //2 is: in M.f (2分)

4-4 What will this code output?

作者: 鲁伟明
单位: 浙江大学

```
public class Test {
        public static void main(String[] args) {
                Integer a = new Integer(127);
                Integer b = 127;
                Integer c = Integer.valueOf("127");

                System.out.println(a==b);  //1
                System.out.println(a==c);  //2
                System.out.println(b==c); //3
        }
}
```

The output of //1 is: false (1分)

The output of //2 is: false (1分)

The output of //3 is: false (1分)

4-5 The code below will print three lines.

作者: 翁恺
单位: 浙江大学

```
class Pet {}
class Dog extends Pet {}
class Pug extends Dog {}
class Cat extends Pet {}
class Rodent extends Pet {}
class Gerbil extends Rodent {}
class Hamster extends Rodent {}

class Main {
        static HashMap<Integer, Class<? extends Pet>> map = new HashMap<Integer, Class<? extends Pet>>();
        static {
                map.put(Pet.class.getName().length(), Pet.class);
                map.put(Dog.class.getName().length(), Dog.class);
                map.put(Pug.class.getName().length(), Pug.class);
                map.put(Cat.class.getName().length(), Cat.class);
                map.put(Rodent.class.getName().length(), Rodent.class);
                map.put(Gerbil.class.getName().length(), Gerbil.class);
                map.put(Hamster.class.getName().length(), Hamster.class);
        }
        public static void main(String[] args) {
                for ( Integer i : map.keySet() )
                        System.out.println(map.get(i).getName());
}}
```

1. Cat (1分)
2. Gerbil (1分)
3. Hamster (1分)

剩余时间: 已结束

4-6 What will this code output?

作者: 鲁伟明
单位: 浙江大学

```
public class Test {
public static void main(String[] args) {
                CloneT c = new CloneT();
                CloneT t = (CloneT)c.clone();
                t.str = "t";
                t.b.setA(3);
                System.out.println(t==c);
                System.out.println(t.b==c.b);
                System.out.println(c.toString()+t.toString());
        }
}
class Base implements Cloneable{
        int a = 1;
        public String toString(){
                return String.valueOf(a);
        }
        public void setA(int a){
                this.a = a;
        }
}

class CloneT implements Cloneable{
    transient int i = 1;
    private int pi = 1;
    static int num = 0;
    String str = "c";
    Base b = new Base();

    public CloneT(){
        num++;
    }
    public Object clone(){
        try{
        return super.clone();
        }catch(CloneNotSupportedException e){
                System.out.println("clone not supported!");
                return null;
        }
    }
    public String toString(){
        return String.valueOf(i) + String.valueOf(pi) + String.valueOf(num) + str + String.valueOf(b);
    }
}
```

false (1分) true (1分) 110c3110t3 (1分)

4-7 The code below will print three lines, they are:

作者: 翁恺
单位: 浙江大学

1. 7 (1分)
2. 2 (1分)
3. 7 (1分)

```
class A {
	public int data=1;
	private int pd = 2;
	public void print() {
		System.out.println(data+pd);
		f();
	}
	protected void f() {
		System.out.println(1);
	}
}
class B extends A {
	public int data=3;
	private int pd = 4;
	public void print() {
		super.print();
		System.out.println(data+pd);
	}
	protected void f() {
		System.out.println(2);
	}
}
public class TestAB {
	public static void main(String[] args) {
		A a = new B();
		a.print();
	}
}
```

4-8 The value of the expression below is: 27 (3分)

作者: 翁恺
单位: 浙江大学

```
IntStream.range(2, 10).
	filter(x->IntStream.range(2, x).filter(k->x%k==0).sum()>0).
	sum()
```

4-9 For the code segment below, after all the lines here, the value of *sum* is: 55 (3分)

作者: 翁恺
单位: 浙江大学

```
int[] a = {1,2,3,4,5,6,7,8,9,10};
for ( int k: a) {
	k++;
}
int sum = 0;
for ( int k: a) {
	sum += k;
}
```

4-10 The output of the code below is: 366 (3分)

作者: 翁恺
单位: 浙江大学

```
enum A {
	JAN(31), FEB(28) {
		public int getDays(int year) {
			return (year%400==0 || (year%4==0 && year%100!=0 ))?29:28;
		}
	}, MAR(31), APR(30), MAY(31), JUN(30), JUL(31), AUG(31), SEP(30), OCT(31), NOV(30), DEC(31);
	A(int d) { days = d; }
	private int days;
	public int getDays(int year) { return days; }
	public static void main(String[] args)  {
		int sum = 0;
		for ( A  e : A.values()) {
			sum+=e.getDays(2008);
		}
		System.out.println(sum);
	}
}
```

第三份与第四份在pta

654523039@qq.com

123456789

第五份期末试卷

2017~2018 学年秋冬学期《Java 应用技术》期末试卷

一、判断题 (1% × 10)

1. `JPanel` must be placed inside a container.
2. We can use `int a[][] = new int[2][]` to define array.
3. For `final int[] ar = new int[10]` we cannot modify the content of the array.
4. Interface methods can be static or final.
5. When an object can be written to a stream using `ObjectOutputStream`, we can also use `ObjectOutputStream` to write the object of its super class.
6. `Box` does not use the default layout `BorderLayout`.
7. A static method cannot refer to `this` or `super` keywords in anyway.
8. Private members of class can be inherited by a sub class, and become protected members in sub class.
9. If constructor of class `A` is made private, objects of class `A` can be instantiated only within the class where it is declared.
10. A thread that has called the `wait()` method of an object will release the lock of the object.

二、单选题 (2% × 30)

1. For object `o` and class `C`, which expression below is the right way to test if `o` is an object of `C`?

   A. `o instanceof C`

   B. `C.isInstance(o)`

   C. `o.getClass() == C`

   D. `o.class == C`

2. Which one below is true about the `StringBuffer` class?

   A. An object of `StringBuffer` can be initialized using the `=` operator.

   B. `StringBuffer` has `append()` method to form a larger string.

   C. An object of `StringBuffer` has a fixed size.

   D. `StringBuffer` inherits all the methods from `String`.

3. What will this code print?

   ```
   String arr[] = new String[5];
   System.out.print(arr[0]);
   ```

   A. null

   B. 0

   C. Class name@hashcode in hexadecimal form.

   D. Exception thrown.

4. `wait()` and `notify()` are used to suspend and resume threads. They are defined as methods of:

   A. `Object`

B. `Thread`

C. `Runnable`

D. `Synchronized`

5. What best describes the appearance of an application with the following code?

```
public class App extends JFrame {
    public static void main(String argv[]) {
        App app = new App();
        app.setLayout(new FlowLayout());
        app.pack();
        app.setVisible(true);
    }

    App() {
        add(new JButton("One"));
        add(new JButton("Two"));
        add(new JButton("Three"));
        add(new JButton("Four"));
    }
}
```

A. A frame with buttons marked One to Four placed one by one.

B. A frame with buttons marked One to Four placed in grids.

C. A frame with buttons marked One to Four placed at each edge.

D. A frame with one large button marked Four in the center.

6. Choose the best fill in the blanks.

```
class Hello2017 {
    public static void main(String[] args) {
        // __put the best here__
    }
}

class Century implements Runnable {
    String m = "Hello";

    Century(String m) {
        this.m = m;
    }

    public void run() {
        System.out.println(m);
    }
}
```

A. `new Thread("Hello").start();`

B. `new Century(new Thread("Hello")).start();`

C. `new Century("Hello").start();`

D. `new Thread(new Century("Hello")).start();`

7. For code below:

```
public class Test {
    public static void main(String[] args) {
        try {
            throw new B();
        } catch (A a) {
            System.out.println("Exception A");
        } catch (B b) {
            System.out.println("Exception B");
        }
    }
}

class A extends Exception {
}

class B extends A {
}
```

It prints:

A. Exception B

B. Compile error

C. Exception A

D. Compiled but exception raises at run-time

8. For code

```
int x = 0x80000000;
System.out.println(Integer.toHexString(-x));
```

The result is:

A. overflow

B. -80000000

C. 80000000

D. error (compilation or run-time)

9. Which of the following is NOT correct?

A. Cannot create an instance of a generic type. (i.e., `new E()`).

B. Generic array creation is not allowed. (i.e., `new E[100]`).

C. A generic type parameter of a class is allowed in a static context.

D. Exception classes cannot be generic.

10. Which statement below is NOT correct?

A. A thread is an instance of `Thread` class.

B. A thread runs the `run()` method of the `Runnable` object.

C. A new born thread can run immediately when `start()` is called.

D. Thread can access data of the `Runnable` object.

11. For `InputStream.read()`, the `read()` with no parameters, which statement below is correct?

A. `read()` returns `char`, because it reads a char from the stream.

B. `read()` returns `int`, because it has to return EOF to indicate the end of the file.

C. `read()` returns `byte`, because it reads a byte from the stream.

D. `read()` returns `int`, as the number of bytes it just read.

12. Implements `Comparable` needs a function, (__) is the one.

```
class Hello2016 implements Comparable {
    public static void main(String[] args) {
    }
    // __put the best here__
}
```

A. `public int compareTo(Object b) {...}`

B. `public int equals(Object b) {...}`

C. `public int compare(Object b) {...}`

D. Need nothing for `Comparable`.

13. For code below:

```
ArrayList<Integer> a = new ArrayList<Integer>();
ArrayList<Double> b = new ArrayList<Double>();
```

Which statement below is NOT correct?

A. `a.getClass() == b.getClass()` is true.

B. `a instanceof ArrayList` is true.

C. `a.getClass().equals(b.getClass())` is true.

D. `a.getClass() == b.getClass()` is false.

14. What is the output of this program?

```
public class Output {
    public static void main(String args[]) {
        Integer i = new Integer(257);
        byte x = i.byteValue();
        System.out.print(x);
    }
}
```

A. 1

B. 0

C. 256

D. 257

15. Which of these method waits for the thread to terminate?

A. `isAlive()`

B. `sleep()`

C. `join()`

D. `stop()`

16. Which of the following declares an array that can support two rows and a variable number of columns?

A. `int myArray[][] = new int[2][];`

B. `int myArray[][] = new int[][2];`

C. `int myArray[][] = new int[2][2];`

D. `int myArray[][] = new int[][];`

17. The program needs a thread, (__) is the one.

```
class Hello2016 {
    public static void main(String[] args) {
        // __put the best here__
    }
}
```

A. `new Runnable(() -> System.out.println("Hi, 2017")).start();`

B. `new Thread(() -> System.out.println("Hi, 2017")).start();`

C. `new Thread(() -> System.out.println("Hi, 2017")).run();`

D. `new Runnable(() -> System.out.println("Hi, 2017")).run();`

18. For code below, the result would be printed?

```
String s1 = new String("hello");
String s2 = new String("hello");
System.out.println(s1 == s2);
System.out.println(s1.equals(s2));
```

A. false, true

B. false, false

C. true, true

D. true, false

19. Given code below:

```
package his;
public class My {}
```

Which statement below is NOT correct?

A. It has to be in a directory named `his`.

B. It has to be in a file named `My.java`.

C. It can be in any file but with no any other class definitions in the same file.

D. Any non-public classes can be defined in the same source file as it is in.

20. What is the output of the following code?

```
public class Test {
    public static void main(String[] args) {
        LinkedList list = new LinkedList<Integer>();
        for (int i = -3; i < 3; i++) {
            list.add(i);
        }
        for (int i = 0; i < 3; i++) {
            list.remove(i);
        }
        System.out.println(list);
    }
}
```

A. [-2, 0, 2]

B. [-3, -2, -1]

C. [0, 1, 2]

D. [-1, 0, 1]

21. What is the output of this program?

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

A. HJavaello

B. HJavalo

C. Hello

D. HJavao

22. Which one below is NOT a valid Java identifier?

A. goto

B. Int

C. 变量

D. $0

23. Which one below generates a random number in [1, 100]?

    A. `x = (int) (101 * Math.random()) + 1;`

    B. `x = (int) (100 * Math.random()) + 1;`

    C. `x = (int) (100 * Math.random());`

    D. `x = (int) (101 * Math.random());`

24. About inner class, which statement below is correct?

    A. No static members are allowed in an inner class.

    B. Inner class cannot be defined as private.

    C. Objects of an inner class can be used in the outer class only.

    D. Inner class can access every member of the outer class.

25. Which component is used to compile, debug and execute java program?

    A. JVM

    B. JDK

    C. JIT

    D. JRE

26. Given the following code:

```
class Background extends Thread {
    public int run() {
        while (true) {
            System.out.println("hello");
        }
        return 0;
    }

    public static void main(String[] args) {
        new Thread(new Background()).start();
    }
}
```

    What will happen when you attempt to compile and run the code?(2分)

    A. It compiles and prints out nothing.

    B. It does not compile because of the function signature of `run()`.

    C. It compiles and prints out "hello" repeatedly.

    D. It does not compile because of the expression inside `main()`.

27. What is the output of this program?

```
public class Test {
    public static void main(String[] args) throws Exception {
        String str = "zju2018";
        Method m = str.getClass().getMethod("toUpperCase");
        m.invoke(str);
        System.out.println(str);
    }
}
```

A. compilation error

B. ZJU2018

C. zju2018

D. runtime error

28. What is the output of this program?

```
public class Hello2017 {
    public static void main(String args[]) {
        boolean b1 = true;
        if ((b1 == true) || place(true)) {
            System.out.print("Hello01, ");
        }
        System.out.println("HelloWorld.");
    }

    public static boolean place(Boolean location) {
        if (location == true) System.out.print("Hello02, ");
        if (location = true) System.out.print("Hello03, ");
        return location;
    }
}
```

A. HelloWorld.

B. Hello01, HelloWorld.

C. Hello02, Hello01, HelloWorld.

D. Hello02, Hello03, Hello01, HelloWorld.

29. Which of the following statements is NOT true?

A. Strings can be initialized using the `=` operator with a string literal value.

B. The `toString()` method can be used to return a `String` value from an object of any class.

C. All strings are terminated with a null ('\0') character.

D. It is impossible to change the contents of a `String` object.

30. Given code below:

```
List<String> ls = new ArrayList<String>();
List<Object> lo = ls;
lo.add(new Object());
String s = ls.get(0);
```

Which statement below is correct?

A. It compiles but exception raises at line 3

B. It does not compile

C. It compiles but exception raises at line 2

D. It compiles but exception raises at line 4

三、填空题 (3% × 10)

1. What will this code output?

```
public class Test {
    public static void main(String[] args) {
        Double a = new Double(127);
        Double b = 127d;
        Double c = Double.valueOf("127");

        System.out.println(a == b);  //1
        System.out.println(a == c);  //2
        System.out.println(b == c);  //3
    }
}
```

The output of //1 is: (1%) The output of //2 is: (1%) The output of //3 is: (1%)

2. The code below will print three lines.

```
class Pet {
}

class Dog extends Pet {
}

class Pug extends Dog {
}

class Cat extends Pet {
}

class Rodent extends Pet {
}

class Gerbil extends Rodent {
}
```

```
class Hamster extends Rodent {
}

class Main {
    static HashMap<Integer, Class<? extends Pet>> map = new HashMap<Integer, Class<?
extends Pet>>();

    static {
        map.put(Pet.class.getName().length(), Pet.class);
        map.put(Dog.class.getName().length(), Dog.class);
        map.put(Pug.class.getName().length(), Pug.class);
        map.put(Cat.class.getName().length(), Cat.class);
        map.put(Rodent.class.getName().length(), Rodent.class);
        map.put(Gerbil.class.getName().length(), Gerbil.class);
        map.put(Hamster.class.getName().length(), Hamster.class);
    }

    public static void main(String[] args) {
        for (Integer i : map.keySet())
            System.out.println(map.get(i).getName());
    }
}
```

1st line: (1%) 2nd line: (1%) 3rd line: (1%)

3. What will this code output?

```
class M {
    void f(M m) {
        System.out.println("in M.f");
    }

    void g(M m) {
        System.out.println("in M.g");
    }
}

class C extends M {
    void f(C c) {
        System.out.println("in C.f");
    }

    void g(M c) {
        System.out.println("in C.g");
    }
}

class H extends C {
    void f(H h) {
        System.out.println("in H.f");
    }

    void g(M h) {
```

```
        System.out.println("in H.g");
    }
}

public class T {
    public static void main(String[] args) {
        M h = new H();
        C c = new H();
        c.f(h);  //1
        h.g(c);  //2
    }
}
```

The output of //1 is: (1%) The output of //2 is: (2%)

4. What will this code output?

```
public class Test {
    public static void main(String[] args) {
        String s1 = "ZJU";
        String s2 = new String("ZJU");
        String s3 = "ZJ";
        s3 += "U";
        String s4 = s2.intern();

        System.out.println(s1 == s2);  //1
        System.out.println(s1 == s3);  //2
        System.out.println(s1 == s4);  //3
    }
}
```

The output of //1 is: (1%) The output of //2 is: (1%) The output of //3 is: (1%)

5. The value of the expression below is:

```
IntStream.range(2, 20)
            .filter(x -> IntStream.range(2, x).filter(k -> x % k == 0).sum() > 0)
            .sum()
```

6. For the code segment below, after all the lines here, the value of sum is:

```
Integer[] a = {1, 2, 3, 4, 5, 6, 7, 8, 9, 10};
for (int k : a) {
    k++;
}
int sum = 0;
for (int k : a) {
    sum += k;
}
```

7. The output of the code below is:

```
enum A {
    JAN(31), FEB(28) {
        public int getDays(int year) {
            return (year % 400 == 0 || (year % 4 == 0 && year % 100 != 0)) ? 29 : 28;
        }
    }, MAR(31), APR(30), MAY(31), JUN(30), JUL(31), AUG(31), SEP(30), OCT(31), NOV(30),
DEC(31);

    A(int d) {
        days = d;
    }

    private int days;

    public int getDays(int year) {
        return days;
    }

    public static void main(String[] args) {
        int sum = 0;
        for (A e : A.values()) {
            sum += e.getDays(2018);
        }
        System.out.println(sum);
    }
}
```

8. The code below will print three lines, they are:

```
package hello;

class A {
    public int data = 5;
    private int pd = 6;

    public void print() {
        System.out.println(data + pd);
        f();
    }

    protected void f() {
        System.out.println("A::f()");
    }
}

class B extends A {
    public int data = 2;
    private int pd = 3;

    public void print() {
        super.print();
        System.out.println(data + pd);
```

```
    }

    protected void f() {
        System.out.println("B::f()");
    }
}

public class TestAB {
    public static void main(String[] args) {
        A a = new B();
        a.print();
    }
}
```

1st line: (1%) 2nd line: (1%) 3rd line: (1%)

9. For code below, the output should be:

```
static void f() throws Exception {
    throw new RuntimeException();
}

public static void main(String[] args) {
    try {
        f();
        System.out.print("A");
    } catch (RuntimeException ex) {
        System.out.print("B");
    } catch (Exception ex1) {
        System.out.print("C");
    } finally {
        System.out.print("D");
    }
    System.out.print("E");
}
```

10. What will this code output?

```
public class Test {
    public static void main(String[] args) {
        CloneT c = new CloneT();
        CloneT c1 = (CloneT) c.clone();
        c1.b.setA(3);
        c1.ii = 3;
        System.out.println(c1 == c);                        //1
        System.out.println(c1.b == c.b);                    //2
        System.out.println(c.toString() + c1.toString());   //3
    }
}

class Base implements Cloneable {
    int a = 1;
```

```
    public String toString() {
        return String.valueOf(a);
    }

    public void setA(int a) {
        this.a = a;
    }

    public int getA() {
        return a;
    }
}

class CloneT implements Cloneable {
    transient int i;
    private int pi;
    static int num;
    Integer ii = new Integer(1);
    transient Base b = new Base();

    public CloneT() {
        num++;
    }

    public Object clone() {
        try {
            return super.clone();
        } catch (CloneNotSupportedException e) {
            System.out.println("clone not supported!");
            return null;
        }
    }

    public String toString() {
        return String.valueOf(i) + String.valueOf(pi) + String.valueOf(num) +
String.valueOf(ii) + String.valueOf(b.getA());
    }
}
```

The output of //1 is: (1%) The output of //2 is: (1%) The output of //3 is: (1%)

答案

一、TTFFF TTFTT

二、ABAAA DBCCC BADAC ABACA BABDB BCBCB

三、（每空答案以 / 分隔）

1. false / false / false
2. Cat / Gerbil / Hamster
3. in M.f / in H.g

4. false / false / true
5. 112
6. 55
7. 365
8. 11 / B::f() / 5
9. BDE
10. false / true / 0011300133