1. 填空题

1：假设

String s1 = "Welcome to Java";

String s2 = s1;

String s3 = new String("Welcome to Java");

那么下面表达式的结果是什么？

(1) s1 == s2 \_\_\_\_\_true\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(2) s1 == s3 \_\_\_\_\_false\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(3) s1.equals(s2) \_\_\_\_\_true\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(4) s2.equals(s3) \_\_\_\_\_true\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(5) s1.compareTo(s2); \_\_\_\_\_0\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(6) s2.compareTo(s3); \_\_\_\_\_0\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(7) s1.charAt(0); \_\_\_\_\_’W’\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(8) s1.indexOf('j'); \_\_\_\_\_-1\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(9) s1.indexOf("to"); \_\_\_\_\_8\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(10) s1.lastIndexOf("o",15) \_\_\_\_9\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(11) s1.substring(3, 11); \_\_\_\_\_”come to “\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(12) s1.endsWith("Java") \_\_true\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(13) s1.startsWith("wel"); \_\_\_\_\_false\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(14) " We come ".trim(); \_\_\_\_\_”We come”\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(15) s1.toUpperCase(); \_\_\_\_”WELCOME TO JAVA”\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(16) s1.replace('o', 'T'); \_\_\_\_”WelcTme tT Java”\_\_\_\_\_\_\_\_\_\_\_\_

2．如果

StringBuffer s1 = new StringBuffer("Java");

StringBuffer s2 = new StringBuffer("HTML");

假设下列每个语句是独立的，每条语句结束后，写出相应结果

(1) s1.append(" is fun"); s1为\_\_”Java is fun”\_\_\_

(2) s1.append(s2); s1为\_\_\_”JavaHTML”\_\_\_\_\_\_\_

(3) s1.insert(2, "is fun"); s1为\_\_\_”Jais funva”\_\_\_\_\_

(4) s1.insert(1,s2); s1为\_\_\_”JHTMLava”\_\_\_\_\_\_\_\_\_\_

(5) char c = s1.charAt(2); c为\_\_\_\_’v’\_\_\_\_\_\_\_\_\_\_\_\_

(6) int i = s1.length(); i为\_\_\_\_4\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(7) s1.deleteCharAt(3); s1为\_\_\_”Jav”\_\_\_\_\_\_\_\_\_\_\_\_

(8) s1.delete(1,3); s1为\_\_\_”Ja”\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(9) s1.reverse(); s1为\_\_\_”avaJ”\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(10) s1.replace(1,3, "Computer"); s1为\_\_”JComputera”\_\_\_\_\_\_\_

(11) String s3 = s1.substring(1,3);

s3为\_\_”av”\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_，s1为\_\_\_\_\_”Java”\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(12) String s4 = s1.substring(2);

S4为\_\_\_\_\_\_”va”\_\_\_\_\_\_\_\_\_，s1为\_\_\_”Java”\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. 假设StringBuffer s = new StringBuffer("Welcome to JAVA");

将s的内容清空的语句是\_\_\_s.delete(0,s.length())\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_。

4.如果

String s1 = "Welcome";  
String s2 = new String("Welcome");  
String s3 = s2.intern();  
String s4 = "Wel" + "come";  
String s5 = "Wel";  
String s6 = "come";  
String s7 = s5 + s6;  
String s8 = "Wel" + new String("come");

那么下面表达式的结果为：

（1）s1 == s2 \_\_\_\_false\_\_\_\_\_\_\_\_

（2）s1 == s3 \_\_\_\_true\_\_\_\_\_\_\_\_

（3）s1 == s4 \_\_\_\_true\_\_\_\_\_\_\_\_

（4）s1 == s7 \_\_\_\_false\_\_\_\_\_\_\_\_

（5）s1 == s8 \_\_\_\_false\_\_\_\_\_\_\_\_

（6）s1.equals(s2) \_\_\_true\_\_\_\_\_\_\_\_\_

（7）s1.equals(s3) \_\_\_true\_\_\_\_\_\_\_\_\_

（8）s1.equals(s4) \_\_\_true\_\_\_\_\_\_\_\_\_

（9）s1.equals(s7) \_\_\_true\_\_\_\_\_\_\_\_\_

（10）s1.equals(s8) \_\_\_true\_\_\_\_\_\_\_\_\_

二、单项选择题

1．可以获取字符串s的最后一个字符的表达式是\_\_C\_\_\_\_\_\_。

（A）s.length()

（B）s[s.length() - 1]

（C）s.charAt(s.length() - 1)

（D）charAt(s, length(s))

2. 下面程序

class C {

public static void main(String[] args) {

String s = “null”;

if(s == null)

System.out.print(“a”);

else if(s.length() == 0)

System.out.print(“b”);

else

System.out.print(“c”);

}

}

的输出为\_\_\_\_C\_\_\_\_。

（A）a （B）b

（C）c （D）null

3. 下面的程序

class C {

public static void main(String[] args) {

String s = “Welcome to ”;

concat(s);

System.out.print(s);

}

public static void concat(String s) {

s += “Java”;

}

}

的输出为\_\_A\_\_\_\_\_\_。

（A）Welcome to （B）Welcome to Java

（C）编译错误 （D）运行时异常

三、编程题

1：编写程序，从控制台或对话框任意输入一个英文字符串，统计字符串中每个英文字母出现的次数并输出到控制台（大小写不敏感）。

package hust.cs.javacourse.homework3;  
  
import java.util.Scanner;  
  
/\*\*  
 \* count number of English lettter ignoring case  
 \*  
 \*/  
public class CountLetter {  
  
 /\*\*  
 \* @param args: command args  
 \*/  
 public static void main (String []args) {  
 Scanner scanner = new Scanner( System.in );  
 String s = scanner.nextLine();  
 String str = s.replace(" ","");  
  
 int []num = new int[26]; //one more for illegal letter  
  
 for (int i = 0; i < str.length(); ++i ) {  
 char tmp = str.charAt(i);  
 if ( tmp >= 'a' && tmp <= 'z'){  
 ++num[tmp - 'a'];  
 } else if (tmp >= 'A' && tmp <= 'Z') {  
 ++num[tmp - 'A'];  
 } else continue;  
 }  
  
 for (int i = 0; i < num.length; ++i) {  
 if (num[i] != 0){  
 System.out.print( (char)(i+'a') + ":" + num[i] + "\t");  
 }  
 }  
 }  
}

2：假设一个车牌号码由三个大写字母和后面的四个数字组成。编写一个程序. 生

成5个不重复的车牌号码。

package hust.cs.javacourse.homework3;  
  
/\*\*  
 \*  
 \* Generate 5 random car number  
 \* a legal car number should be made up of 3 capital letter with 5 number  
 \*/  
public class RandomCarNumber {  
 /\*\*  
 \*  
 \* @param args: command param  
 \*/  
 public static void main(String[] args) {  
 final int N = 5; //total  
 for (int n = 1; n <= N; ++n){  
 String carNum = "";  
 for (int i = 1; i <= 7; ++i) {  
 if (i <= 3) {  
 char tmp = (char) ('A' + Math.random() \* ('Z' - 'A' + 1));  
 carNum += tmp;  
 } else {  
 int tmp = (int)(Math.random()\*10);  
 carNum += tmp;  
 }  
 }  
 System.out.println("Car Number " + n + ": " + carNum);  
 }  
 }  
}