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); \_\_\_\_\_\_\_\_\_\_\_true\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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

(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\_\_\_\_\_\_\_\_”ava”\_\_\_\_\_\_\_\_\_\_，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 \_\_\_\_\_true\_\_\_\_\_\_\_

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

（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

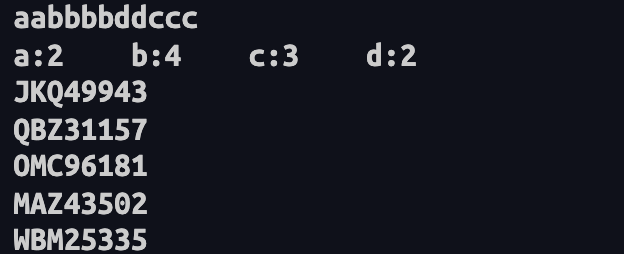
（C）编译错误 （D）运行时异常

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）。

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。



代码

**package chapter5;**

**import java.util.HashMap;**

**import java.util.HashSet;**

**import java.util.List;**

**import java.util.Random;**

**import java.util.stream.Stream;**

**import java.util.Scanner;**

**import java.util.ArrayList;**

**public class Sulotion {**

**private HashSet<String> plateNumers = *new* HashSet<>();**

**private Random random = *new* Random();**

**public void countCharTime(String s) {**

**int[] map = *new* int[26];**

**s.toLowerCase();**

***for* (int i = 0; i < s.length(); i++) {**

**map[s.charAt(i) - 'a']++;**

**}**

***for* (int i = 0; i < 26; i++) {**

***if* (map[i] != 0) {**

**System.out.print("" + (char)(i + 'a') + ":" + map[i] + "    ");**

**}**

**}**

**}**

**public String gerneratePlateNumber(int charNum, int digitsNum) {**

**StringBuilder s = *new* StringBuilder();**

***for* (int i = 0; i < charNum; i++) {**

**s.append((char)(getRandomNumberInRange(0, 25) + 'A'));**

**}**

***for* (int i = 0; i < digitsNum; i++) {**

**s.append((char)(getRandomNumberInRange(0, 9) + '0'));**

**}**

***return* s.toString();**

**}**

**public List<String> gerneratePlateNumber(int num){**

**List<String> res = *new* ArrayList<>();**

***for*(int i=0;i<num;i++){**

**String temp = gerneratePlateNumber(3, 5);**

***while*(!plateNumers.add(temp)){**

**System.out.println(temp+"is exist before");**

**temp = gerneratePlateNumber(3, 5);**

**}**

**res.add(temp);**

**}**

***return* res;**

**}**

**private int getRandomNumberInRange(int start, int end) {**

***return* (random.nextInt(end - start + 1) + start);**

**}**

**public static void main(String[] args){**

**java.util.Scanner sc = *new* Scanner(System.in);**

**Sulotion sulotion = *new* Sulotion();**

**String s = sc.nextLine();**

**sulotion.countCharTime(s);**

**List<String> res = sulotion.gerneratePlateNumber(5);**

**System.out.println();**

**res.stream().forEach(o->System.out.println(o));**

**}**

**}**