三 、

1、答案：

(1): new StringBuffer()

(2): i<input.length()

(3): input.charAt(i)

(4): (char)(c+4)

(5): s.append(c);

2、答案：

extends Exception

super(info)

throws TxtEndException

str.endWith(“txt”)

TxtEndException e

四、

1、答案：

代码能实现所要求功能即可得10分，参考代码如下：

boolean guess(int n) {

if (n==1) return true;

if (n%2==0) return guess(n/2);

else return guess(3\*n+1);

2、答案：

**import** java.util.\*;

**class** Slaver **extends** Thread{

**private** Piple pip;

**public** Slaver(Piple pip) {**this**.pip = pip; }

**public** **void** run() {

**while**(**true**) {

ArrayList<Integer> data = pip.pollData();

**if** (data == **null**) {

**try** { Thread.*sleep*(1000); }

**catch**(Exception e) {System.***out***.println(e); }

**continue**;

}

**int** sum = 0;

**for**(Integer e: data) { sum += e; } //2 points

pip.addResult(sum);

}

}

}

**public** **class** Master {

**private** Slaver s;

**private** Piple pip;

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

**public** Master() {

pip = **new** Piple();

s = **new** Slaver(pip);

}

**private** ArrayList<Integer> getBatch(**int** low, **int** high, **int** num) {

ArrayList<Integer> res = **new** ArrayList<>();

**float** gap;

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

gap = r.nextFloat();

gap = gap \* (high - low); //1 points

**int** v = (**int**)gap + low;

**if** (v > high) v = high;

res.add(v);

}

**return** res;

}

**public** **void** loop(**int** low, **int** high, **int** num, **int** seconds) {

s.start(); //1 points

**while**(**true**) {

**try** { Thread.*sleep*(seconds); }

**catch**(Exception e) {System.***out***.println(e); }

ArrayList<Integer> batch = getBatch(low, high, num);

pip.addData(batch); //1 points

**for**(Integer d: batch) { System.***out***.print(d + ", "); }

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

Integer res = pip.pollResult(); //1 points

**if** (res == **null**) **continue**;

System.***out***.println("res: " + res);

}

}

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

Master m = **new** Master();

m.loop(1, 10, 5, 5);