# Question 1

手机屏幕截图

描述已自动生成

**public** **class** Q1 {

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

**int** largestPalindrome = 0;

**int** n1 = 0;

**int** n2 = 0;

**for** (**int** i = 100; i < 1000; i++) {

**for** (**int** j = 100; j < 1000; j++) {

**if** (*isPalindrome*(i\*j)) {

**if**(largestPalindrome < i \* j) {

largestPalindrome = i \* j;

n1 = i;

n2 = j;

}

}

}

}

System.***out***.println("Largest Palindrome of 3-digit numbers is "

+ n1 + " \* " + n2 + " = " + largestPalindrome);

}

**public** **static** **boolean** isPalindrome(**int** num) {

String numStr = String.*valueOf*(num);

StringBuffer sb = **new** StringBuffer(numStr);

String reverseNumStr = sb.reverse().toString();

**if** (numStr.equals(reverseNumStr)) {

**return** **true**;

} **else** {

**return** **false**;

}

}

}

# Question 2

文本

描述已自动生成

**public** **class** Q2 {

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

//The acutual Fibonacci sequence is 1, 1, 2, 3, 5, 8...

//Is this case, the exam paper said is 1, 2, 3 ,5 ,8

//It missed a '1', so if you want to get 1000th of sequence,

//You need to input 1001.

System.***out***.println(*fibonacci*(1001));

}

**public** **static** **int** fibonacci(**int** n) {

**if** (n <= 1) {

**return** n;

}

**else** {

**return** *fibonacci*(n-1) + *fibonacci*(n-2);

}

}

}

# Question 3

文本

描述已自动生成

**import** java.util.Scanner;

**public** **class** Q3 {

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

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

**int** x = sc.nextInt();

**int** n = sc.nextInt();

sc.close();

System.***out***.println(*getProbability*(x,n));

}

**public** **static** **double** getProbability(**int** x, **int** n) {

**int** N = 1000000;

**int** classSize = n;

**int** sameBirthdayNum = x;

**int** count = 0;

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

**int**[] birthdays = **new** **int**[365];

**for** (**int** j=0; j < classSize ; j++) {

**int** randomBirthday = (**int**) (365 \* Math.*random*());

**if**(birthdays[randomBirthday] >= sameBirthdayNum - 1) {

count ++;

**break**;

}

birthdays[randomBirthday]++;

}

}

**return** (**double**) 100 \* count / (**double**) N;

}

}

# Question 4

文本

描述已自动生成

**import** java.util.Scanner;

**import** java.util.LinkedList;

**import** java.util.Collections;

**import** java.util.Comparator;

**public** **class** Q4 {

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

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

LinkedList <String> input = **new** LinkedList <String>();

**int** SIZE = sc.nextInt();

sc.nextLine();

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

input.add(sc.nextLine());

}

Collections.*sort*(input, **new** Comparator<String>() {

@Override

**public** **int** compare(String o1, String o2) {

**if**(o1.length() != o2.length()) {

**return** o1.length() - o2.length();

}

**else** {

**return** o1.compareTo(o2);

}

}

});

**for**(String element : input ) {

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

}

}

}