package javaapplication5;

import java.util.Random;

import java.util.Scanner;

public class JavaApplication5 {

public static void main(String[] args) {

int bits[] = new int[10];

int i = 0;

Scanner sc = new Scanner(System.in);

Random randomGenerator = new Random();

int r = randomGenerator.nextInt(20);

System.out.print("\nEnter bits\n");

int parity = 0;

for (i = 0; i < 7; i++) {

bits[i] = sc.nextInt();

if (bits[i] == 1) {

parity++;

}

}

if (parity % 2 == 0) {

parity = 0;

}

System.out.println("\np1: " + parity);

if (r < 7) {

if (bits[r] == 0) {

bits[r] = 1;

} else {

bits[r] = 0;

}

}

int parity2 = 0;

for (i = 0; i < 7; i++) {

if (bits[i] == 1) {

parity2++;

}

}

System.out.println("\n Rand: " + r);

if (parity2 % 2 == 0) {

parity2 = 0;

}

if (parity == parity2) {

System.out.println("\n valid msg");

} else {

System.out.println("\n invalid msg");

}

}

}

**Output:**

Enter bits

1

0

0

0

0

0

0

p1: 1

Rand: 18

valid msg