Lösningsförslag, kontrollskrivning 2 PTDC

2011–11–14

1.
```
public class Grades {
    public static void main(String[] args) {
        Scanner scan = null;
        try {
            scan = new Scanner(new File("result.txt"));
        } catch (FileNotFoundException e) {
            System.err.println("Filen kan inte öppnas");
            System.exit(1);
        }
        int[][] count = new int[4][4]; // 3-or i [][1], 4-or i [][2], 5-or i [][3]
        while (scan.hasNextInt()) {
            int prevKnowledge = scan.nextInt();
            int gradeIndex = scan.nextInt();
            if (gradeIndex > 0) {
                gradeIndex = gradeIndex - 2;
            }
            count[prevKnowledge - 1][gradeIndex]++;
        }

        for (int i = 0; i < count.length; i++) {
            for (int j = 0; j < count[i].length; j++) {
                System.out.print(count[i][j] + " ");
            }
            System.out.println();
        }
    }
}
```

2.
```
public int getNbrCards() {
    return n;
}

public Card getBestCard() {
    int bestSuit = Integer.MAX_VALUE;
    int bestRank = Integer.MIN_VALUE;
    Card bestCard = null;
    for (int i = 0; i < n; i++) {
        Card c = cards[i];
        if (c.getSuit() < bestSuit
                || (c.getSuit() == bestSuit && c.getRank() > bestRank)) {
            bestSuit = c.getSuit();
            bestRank = c.getRank();
            bestCard = c;
        }
    }
    return bestCard;
}
```

3.
```
public class Student {
    private ArrayList<Exam> exams;

    public Student() {
        exams = new ArrayList<Exam>();
    }

    public void addExam(Course course, String date, int result) {
        exams.add(new Exam(course, date, result));
    }

    public int getNbrExams() {
        return exams.size();
    }

    public double getTotalCredits() {
        double total = 0;
        for (int i = 0; i < exams.size(); i++) {
            Exam e = exams.get(i);
            if (e.getResult() > 0) {
                total += e.getCourse().getCredits();
            }
        }
        return total;
    }
}
```