

2007 AP® COMPUTER SCIENCE A FREE-RESPONSE QUESTIONS

The following table shows an example of an answer key, a student's answers, and the corresponding point values that would be awarded for the student's answers. In this example, there are six correct answers, three incorrect answers, and one omitted answer. The student's score is $((6 * 1) - (3 * 0.25)) = 5.25$.

Question number	0	1	2	3	4	5	6	7	8	9
key	"A"	"C"	"D"	"E"	"B"	"C"	"E"	"B"	"B"	"C"
answers	"A"	"B"	"D"	"E"	"A"	"C"	"?"	"B"	"D"	"C"
Points awarded	1	-0.25	1	1	-0.25	1	0	1	-0.25	1

- (a) Write the `StudentAnswerSheet` method `getScore`. The parameter passed to method `getScore` is an `ArrayList` of strings representing the correct answer key for the test being scored. The method computes and returns a `double` that represents the score for the student's test answers when compared with the answer key. One point is awarded for each correct answer and $\frac{1}{4}$ of a point is deducted for each incorrect answer. Omitted answers (indicated by "?") do not change the student's score.

Complete method `getScore` below.

Nick case

```

/** @param key the list of correct answers, represented as strings of length one
 *   Precondition: key.size() is equal to the number of answers in this answer sheet
 *   @return this student's test score
 */
public double getScore(ArrayList<String> key) {
    int correct = 0, wrong = 0, omitt = 0;
    for (int i; i < answers.size(); i++) {
        if (answers.get(i).equals(key.get(i))) {
            correct++;
        }
        else if (answers.get(i).equals("?")) {
            omitt++;
        }
        else {
            wrong++;
        }
    }
    double total = ((1 * correct) + (0 * omitt)) - (wrong * .25);
    return total;
}

```

just want to show value (pointing to the `1 * correct` term)

put in just to have omitted answers shown in equation (pointing to the `0 * omitt` term)

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