



Challenge **Implement Recursion**

Oak Bridge School Management System

Educational institutions are often burdened with cumbersome paperwork and manual processes. They generally find it difficult to maintain records of the students' results, their attendance reports, etc. The management and teachers at the Oak Bridge School have conducted exams for their high school students and the evaluation of the answer scripts has also been completed. The teachers with the help of a technical team, now need to put a system in place to automate the grading process. Teams are formed and each team is assigned a task.

CHALLENGE



Challenge Statement

- The students are evaluated on only 3 core subjects, Math, Science, English
- The test will be taken for 100 marks, and the student needs to score a minimum of 35 marks to pass the test.
- Find the top score on the total marks scored in the test.

Tasks

- Task 1

- Write all the logic for the program inside the `OakBridgeSchool` class provided.
- Write the logic to find the top score of the class inside the below method

```
public int findTopScore(int [] totalMarks,int len)
```

- The `findTopScore` method takes the array of total marks and length of the array and returns the top score.
- The `findTopScore` method must be written using recursive logic.

Tasks (cont'd)

- **Task 1** - Write the logic to calculate the average science mark inside the below method using recursion

```
public double calculateAverageScienceMarks (int[] science, int len)
```

- **Task 2** - Write the logic to calculate the average english mark inside the below method using recursion

```
public double calculateAverageEnglishMarks (int[] english, int len)
```

- **Task 3** - Write the logic to calculate the average math mark inside the below method using recursion

```
public double calculateAverageMathMarks (int[] math, int len)
```