



Challenge

Java String

Manipulations

Oak Bridge School Management System

Educational institutions are burdened by cumbersome paperwork and manual processes, and they 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, 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

- Once the grading process is complete, the team of teachers need to prepare a report for each student.
- As an initial step the names of students must be displayed in specific formats.
- In this challenge declare the first names of students and their corresponding surnames in arrays and perform some manipulations on the String data.

Tasks

- Task 1
 - Write all the logic for the program inside the `OakBridgeSchool` class provided.
 - Write the logic to convert the first name of a student to uppercase in the below method.

```
public String convertToUpperCase(String name)
```

Tasks (cont'd)

- **Task 1** - Find the shortest surname from the given array.

```
public String shortestSurname(String[] surnames)
```

- **Task 2** - Find if any of the first names of the students are repeated.

```
public boolean checkIfNamesAreRepeated(String[] names)
```

- **Task 3** - Concatenate first name and surname of all the students with a space in between.

```
public String[] concatenateNameAndSurname(String[] names, String []  
surnames)
```

- **Task 4** - Write a method to display the array after the manipulations are completed.

```
public void displayStudentNames(String[] namesArray)
```

Tasks (cont'd)

- In the main method:
- Declare arrays with first names and surnames of the students.

```
String[] studentNames = {"Michelle", "Kate", "Ann", "Tina", "Tom", "Sam", "Ria", "Pam", "Kate", "Leo"};  
String[] studentSurnames = {"Smith", "Johnson", "Williams", "Brown", "Jones", "Miller", "Davis", "Martin", "Clark", "King"};
```

- Call the `convertToUpperCase` method and pass all the values of the `studentNames` and display the results.

```
The student names in uppercase :  
MICHELLE, KATE, ANN, TINA, TOM, SAM, RIA, PAM, KATE, LEO,
```


Tasks (cont'd)

- Call the `shortestSurname` method and pass all the values of the `studentSurnames` and display the shortest surname.

```
The shortest surname is: King
```

- Call the `checkIfNamesAreRepeated` method and display the results.

```
There are repeated names in the name list : true
```

- Call the `concatenateNameAndSurname` and display the results.

```
The student full names (name and surname) :  
Ann Smith, Kate Johnson, Kate Williams, Leo Brown, Michelle Jones, Pam Miller, Ria Davis, Sam Martin, Tina Clark, Tom King,
```