

Challenge 2: Calculate Overall Percentage of Student's Marks

Let's test your knowledge by solving a challenge.

We'll cover the following

- Problem statement
 - Structure Student
 - Function calculate_percentage
 - Sample input
 - Sample output
- Coding exercise

Problem statement

In this challenge, you will be given the marks of a student in 4 subjects out of 100. Your task is to calculate the overall percentage of the student. The basic formula for calculating the percentage is given below:

$$\text{Percentage} = (\text{Marks Obtained} / \text{Total Marks}) * 100$$

Since there are 4 subjects and each subject will be of **100** marks, total marks will be **400**.

Structure Student

To store the marks and name of a student, we have already defined the structure **Student** for you.

```
struct Student {  
    string name ; —————> store the name of Student  
    double marks [ 4 ] ; —————> Array to store marks of Student in 4 different subjects  
};
```

Function `calculate_percentage`

In this challenge, we have already declared the function `calculate_percentage` that takes a value of type `Student` as its input parameter and returns a value of type `double` in output.

`double calculate_percentage (struct Student s)`

You have to write your program logic inside the function `calculate_percentage`.

Sample input

```
calculate_percentage({John, {30.500000 , 49.700000 , 22.300000 , 32.900000 }})
```

Sample output

```
33.85
```

Coding exercise

Before diving directly into the solution, first, try to solve it yourself, and then check if your code passes all the test cases. If you get stuck, you can always see the given solution.

Good Luck! 👍

```
// Structure to store Student information
struct Student {
    string name;
    double marks[4];
};

// Function to calculate percentage
double calculate_percentage(struct Student s) {
    double percentage = 0;
    // Write your code here
    return percentage;
}
```



🎉 Well done! If you have solved the problem, give yourself a round of applause.

In case you are stuck, let's go over the solution review in the next lesson.