

Challenge 2: Calculate Student's Total Marks

In this exercise, you have to calculate a student's total marks using the concept of Classes

WE'LL COVER THE FOLLOWING ^

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Problem Statement

Write a C++ **class** called `student` with

- **private** *member variables*:
 - `name` (`string` type)
 - `mark1` and `mark2` (**float** type)

And *member functions*:

- `Get_Marks(int marknumber)`, a *function* which should return `mark1` if `marknumber` equals `1` and `mark2` otherwise.
- `calc_total()` *function* should take the **two** marks entered and *return* their **sum**.

Also *define two constructors*:

- A *default constructor* that takes **no parameters** and *initializes* the values to

zeros and `null`.

- A constructor that takes the **three variables** and sets them to given values.

Input

Name of student, marks in first and second test

Output

Sum of both marks

Sample Input

```
("Jack", 60, 70)
```


Sample Output

```
GetMarks(1) => 60
GetMarks(2) => 70
calc_total() => 130
```

Coding Exercise

Write your code below. It is recommended that you try solving the exercise yourself before viewing the solution.

Good Luck!

 Exercise

 Solution

```
class Student{
private:
    // Define private variables here
public:
    Student() {
        // Write definition here
    }
    Student(string na, float ma1,float ma2){
        // Write definition here
    }
    int GetMarks(int marknumber){
        // Write definition here
    }
    float calc_total(){
        // Write definition here
    }
};
```



Solution Review

- Define the class data members `mark1`, `mark2` and `name`
 - Define the constructor and assign initialization values
 - Then, define an overloaded constructor
 - Define the `GetMarks` function inside the class
 - Finally, write the `calc_total` function using `mark1` and `mark2`
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In the next challenge, we'll solve another problem of implementing a calculator class.