Challenge 4: Add Main Diagonal Elements in a Matrix

Let's test our knowledge by solving a challenge in this lesson.

We'll cover the following

Problem statement

In this challenge, your task is to write a function `add_diagonal`. Your function signature would be:

```
int  add_diagonal ( int  arr [ 3 ] [ 3 ]  , int row , int col )
```

The input array `arr[ ][ ]` will contain the values of type `int`. Your task is to add the elements in the main diagonal of the matrix.

> 📝 The row and column index of the main diagonal elements are the same.

Sample input

```
add_diagonal ({1, 2, 3}, {4, 5, 6}, {7, 8, 9}, 3, 3);
```

Sample output

```
15
```

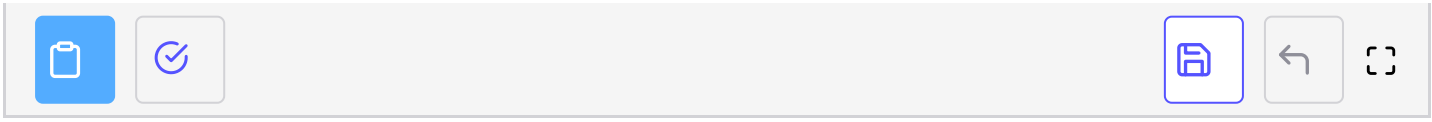
Coding exercise

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.

> 📝 Please don't modify the given function `add_diagonal`. Else, your code will not pass the test cases.

Good Luck! 👍

```
int add_diagonal(int arr[3][3], int row, int col) {
  int sum;
  // Write your code here
  return sum;
}
```



🎉If you have solved the problem, congratulations!

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