## - Exercise

Let's test your knowledge of automatic type deduction with this exercise.

```
WE'LL COVER THE FOLLOWING ^
    Exercise 1
```

## Exercise 1 #

Let's get used to the rules of implicit type casts by arithmetic operations. Call the add function that we studied earlier with different arguments and ask for the return type of each operation with typeid.

Here are a few examples:

```
std::cout << typeid( add(1, false) ).name() << std::endl;</pre>
std::cout << typeid( add('a', 1) ).name() << std::endl;</pre>
std::cout << typeid( add(false, false) ).name() << std::endl;</pre>
std::cout << typeid( add(true, 3.14) ).name() << std::endl;</pre>
std::cout << typeid( add(1, 4.0) ).name() << std::endl;</pre>
```

We can try out our work in the code widget below:

```
#include <iostream>
#include <typeinfo>
template<typename T1, typename T2>
auto add(T1 first, T2 second) -> decltype(first + second){
    return first + second;
int main(){
  // Write your code here
```







We'll discuss the solution in the next lesson.		