# - Example

Let's understand default arguments better by looking at an example.

WE'LL COVER THE FOLLOWING


- Default arguments
  - Explanation


## Default arguments

```
#include <iostream>

bool isTempOK(const int temp, const int low = 20, const int high = 50){
  return (low < temp) && (temp < high);
}

int main(){

  std::cout << std::boolalpha << std::endl;

  std::cout << "isTempOK(20): "  << isTempOK(20) <<  std::endl;
  std::cout << "isTempOK(30): "  << isTempOK(30) <<  std::endl;
  std::cout << "isTempOK(50): "  << isTempOK(50) <<  std::endl;

  std::cout <<  std::endl;

  std::cout << "isTempOK(30, 30): "  << isTempOK(30, 30) <<  std::endl;
  std::cout << "isTempOK(50, 30, 100): "  << isTempOK(50, 30, 100) <<  std::endl;

  std::cout << std::endl;

}
```

## Explanation

This is a perfect example of how default arguments work in C++.

- Since the arguments are read from left to right, the function calls in lines

11 to 13 will apply the argument to the `temp` parameter.

- The other two parameters receive their default arguments.
- In line 17, a second argument is provided, which will replace the default value of `low`.
- In the function call in line 18, all the arguments are provided. Hence, none of the default arguments are used.

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In the next lesson, we will cover **function overloading**.