

- Example

Let's have a look at an example of dependent names in this lesson.

WE'LL COVER THE FOLLOWING ^

- Example: Template Lookup
- Explanation

Example: Template Lookup

```
// templateLookup.cpp

#include <iostream>

void g(double) { std::cout << "g(double)\n"; }

template<class T>
struct S {
    void f() const {
        g(1);           // non-dependent
    }
};

void g(int) { std::cout << "g(int)\n"; }

int main(){
    g(1);               // calls g(int)

    S<int> s;
    s.f();              // calls g(double)
}
```



Explanation

If we access the defined functions `g` with a `double` or `int` type object, they work fine. We have created the `struct` object `S` of `int` type in line 19. When we try to access the `g` function then it follows the same order and calls the `g` with a `double` type parameter which is defined first. The call to `s.f()` on line 17

with a `double` type parameter which is defined first. The call to `g()` on line 17 calls the `g(int)` version and the call to `g()` through the call to `f()` on line 20 calls `g(double)`.

Let's start with variadic templates in the next lesson.