

MA122 - Computer Programming and Applications

Indian Institute of Space Science and Technology

March 23, 2017

Lecture 22

MA122 -
Computer
Programming
and
Applications

Namespace

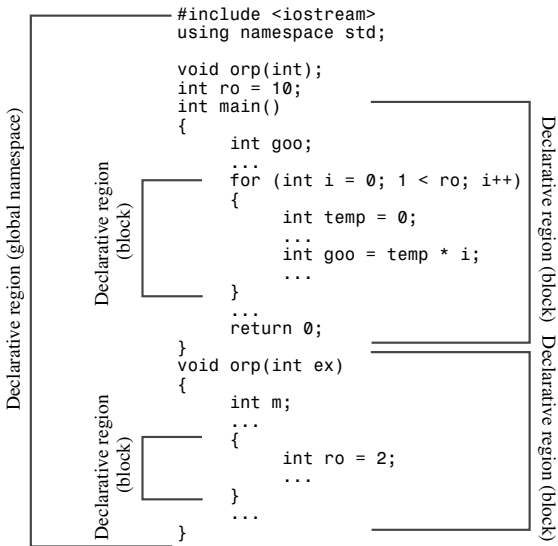
Using
declarations

Using
directives

1 Namespace

2 Using declarations

3 Using directives



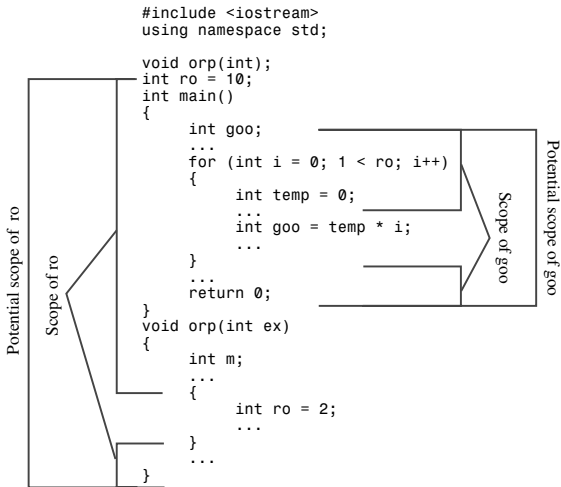


Figure 9.6 Potential scope and scope.

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using declarations

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```
1 #include <iostream>
2 #include <string>
3 using std::string;
4 int main()
5 {
6     string str = "Example";
7     using std::cout;
8     cout << str;
9 }
```

using declarations

```
1 namespace Jill {
2     double bucket(double n) { ... }
3     double fetch;
4     struct Hill { ... };
5 }
6 // ::, the scope-resolution operator
7 char fetch;
8 int main()
9 {
10     using Jill::fetch; // put fetch into local namespace
11     double fetch;     // Error! Already have a local
12                       // fetch
13     cin >> fetch;     // read a value into Jill::fetch
14     cin >> ::fetch;  // read a value into global fetch
15     ...
16 }
```

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using directives

```
1 namespace Jill {
2     double bucket(double n) { ... }
3     double fetch;
4     struct Hill { ... };
5 }
6 char fetch; // global namespace
7 int main() {
8     using namespace Jill; // import all namespace names
9     Hill Thrill; // create a type Jill::Hill structure
10    double water = bucket(2); // use Jill::bucket();
11    double fetch; // not an error; hides Jill::fetch
12    cin >> fetch; // read a value into the local fetch
13    cin >> ::fetch; // read a value into global fetch
14    cin >> Jill::fetch; } // into Jill::fetch
15
16 int foom() {
17     Hill top; // ERROR
18     Jill::Hill crest; } // valid
```