

C++ Basics - Standard I/O and namespaces

```
myProgram.cpp
{
  int x;
  x = x + 5;
  return 0;
}
```

This program is self contained,
does no Input/output (I/O)
and calls no external
subroutines

- just compile it and run it.

C++ Basics - Standard I/O and namespaces

Libraries of
Definitions
Declarations
Subroutines

myProgram.cpp

```
int main() {
```

```
    // do some I/O:
```

```
    // write to the terminal
```

```
    // get input from the
```

```
    // keyboard
```

```
    ...
```

C++ Basics - Standard I/O and namespaces

iostream definitions
declarations and
subroutines

std::

```
myProgram.cpp
#include <iostream>
int main() {
    std::cout << "Hi!";
    std::cout << std::endl;
}
```

C++ Basics - Standard I/O and namespaces

iostream definitions
declarations and
subroutines

std::

myProgram.cpp

```
#include <iostream>
```

```
using namespace std;
```

```
int main() {
```

```
    cout << "Hi!";
```

```
    cout << endl;
```

```
}
```

Compiler will
call linker
to link to
this library

allows
you to
access
all std::
variables
but drop
the std::

What if you name a variable with the same name
as is used in std? Problems arise.

That's why serious coders usually don't use a namespace,
they just use the prefix.

For brevity, we may write "code fragments"

```
cout << "What's your favourite bunny?  
Enter an integer: " ;
```

```
cin >> favourite ;
```

```
cout << "I love bunny #" <<
```

```
favourite << ", too! " << endl ;
```

We will assume such fragments are properly prefaced with "#include <iostream> using namespace std"