

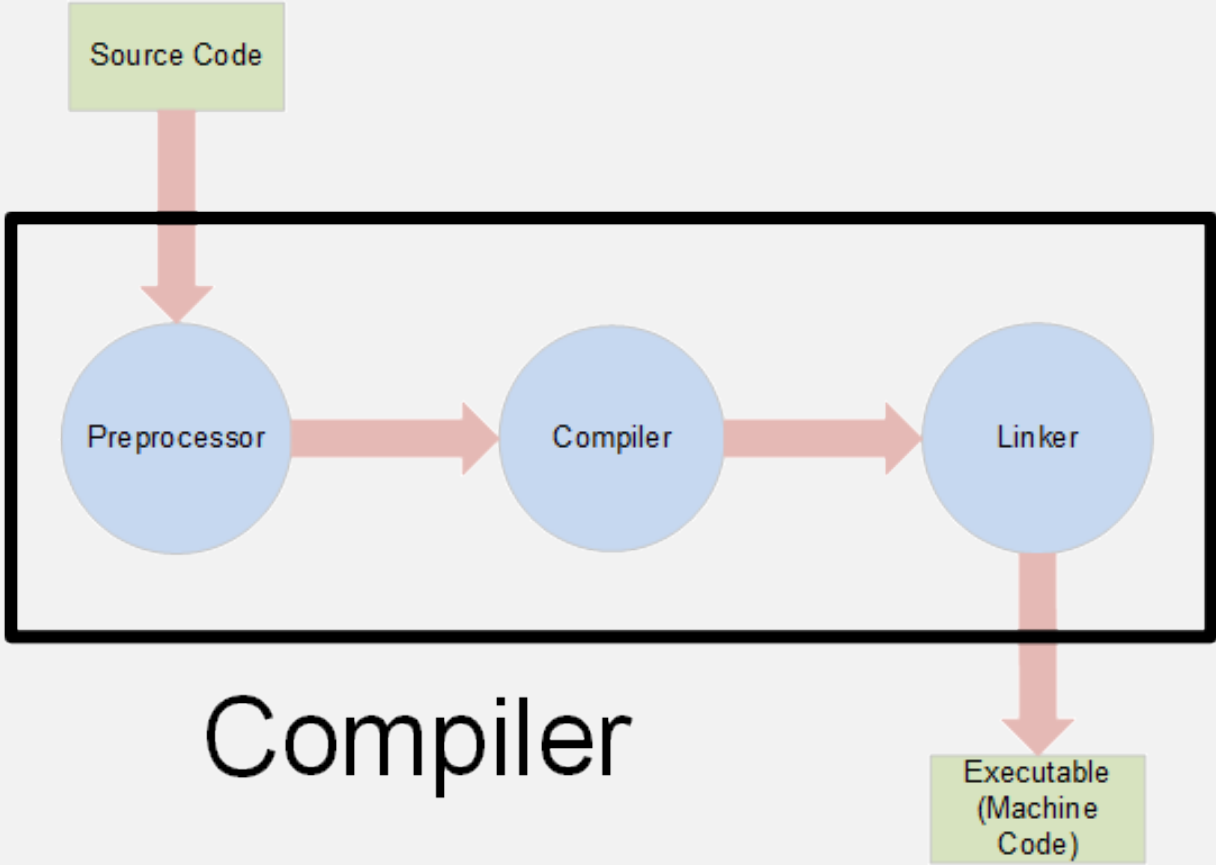


COMPILER OPERATION

Translating C++ Into Machine Code



THE C++ COMPILER SYSTEM





THE PREPROCESSOR

- The preprocessor processes directives that begin with #
- #include
 - #include <header_file>
 - #include "header_file"
 - #define NAME_SIZE 25
 - Symbolic constant, named constant, manifest constant

VALUE OF SYMBOLIC CONSTANTS

```
for (int c = 0; c < 25; c++)
{
    . . .
}

for (int s = 0; s < 25; s++)
{
    . . .
}

if (x >= 25)
    . . .
```

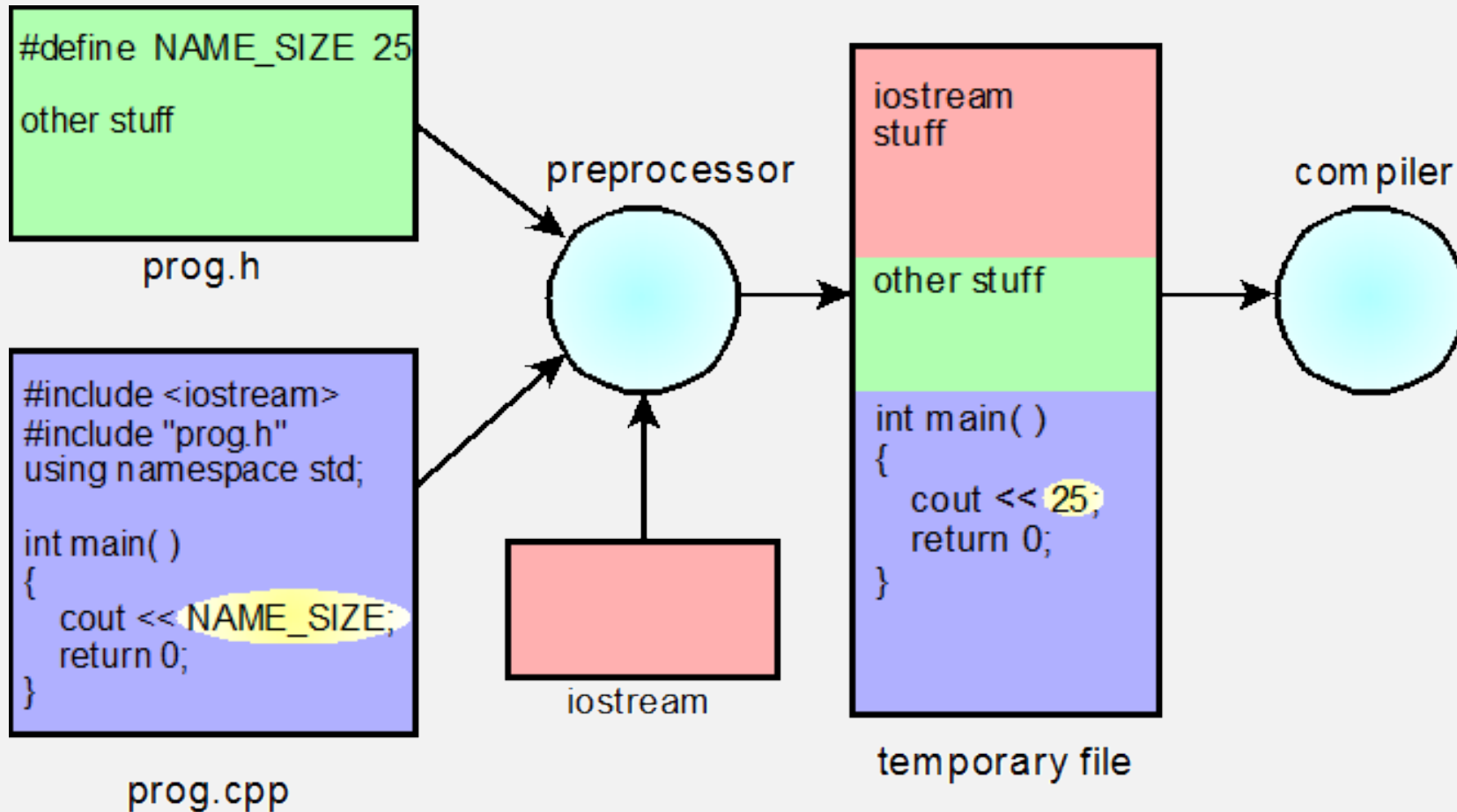
```
#define NAME_SIZE 25
#define N_STUDENTS 25

for (int c = 0; c < NAME_SIZE; c++)
{
    . . .
}

for (int s = 0; s < N_STUDENTS; s++)
{
    . . .
}

if (x >= NAME_SIZE)
    . . .
```

HOW THE PREPROCESSOR WORKS



THE COMPILER COMPONENT

