

CS 103000

Prof. Madeline Blount

Week 1



*Dall-E 2: cats learning C++ in the forest on '90's technology*

# ATTENDANCE:

<https://cs103-proton.glitch.me/>

Please, please follow  
academic honesty policy.



Dall-E 2: cats learning C++ in the forest on '90's technology

Hack the System!



## STREAMS :

← "PUT TO" - INSERTION



```
cout << "onscreen!" <<  
endl;
```



```
cin >> variableName;
```



→ "GET FROM"  
EXTRACTION





PYTHON:

```
print("You have " + str(numCats) + "  
cats.")
```



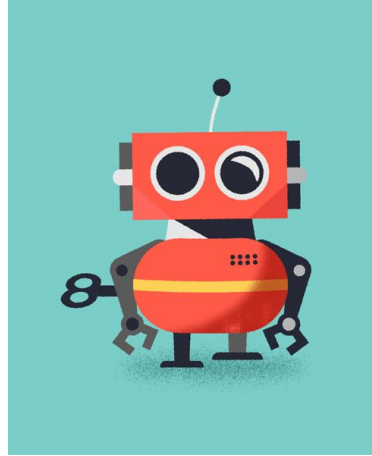
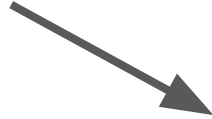
CONCATENATION!

```
#include <iostream>  
using namespace std;  
cout << "You have " << numCats << " cats." << endl;
```

source code (C++)

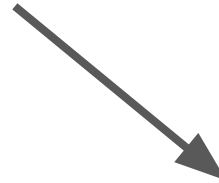
```
#include <iostream>

int main() {
    std::cout << "Hello, World";
    return 0;
}
```



PREPROCESSOR  
COMPILER  
LINKER

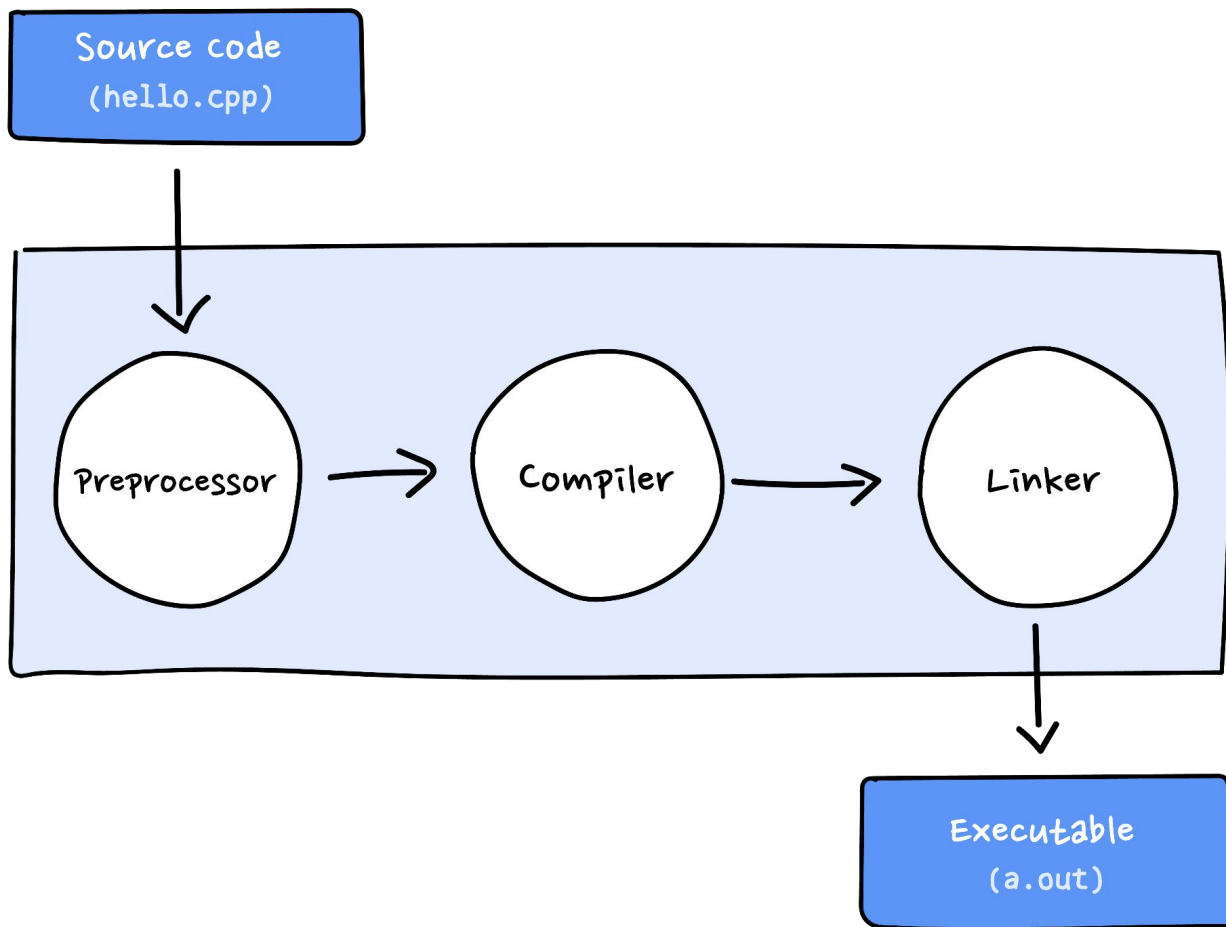
- `#include ...`
- `line by line`



machine code

```
10100011
10100101
10100101
10011111
```

binary



THE #1 PROGRAMMER EXCUSE  
FOR LEGITIMATELY SLACKING OFF:

"MY CODE'S COMPILING."







× hello.cpp



```
1  #include <iostream>
2
3  ▼ int main() {
4
5      std::cout << "Hello World!\n";
6
7  }
```