

Lecture 2: Intro to C

- Admin stuff
- Why C?
- hello world example (hello.c)
- Compilation process
- C pre-processor
- C types and qualifiers
- Lots of small examples
 - ints.c
 - floats.c
 - types.c
- functions?

Intro to C programming

- Why C?
 - Millions LOC
 - Important future classes
-

Hello World in C

```
#include <stdio.h>
```

↳ java import

```
/* This is a comment */
```

you have to have this

```
int main (int argc, char * argv[]) {
```

↳ return value

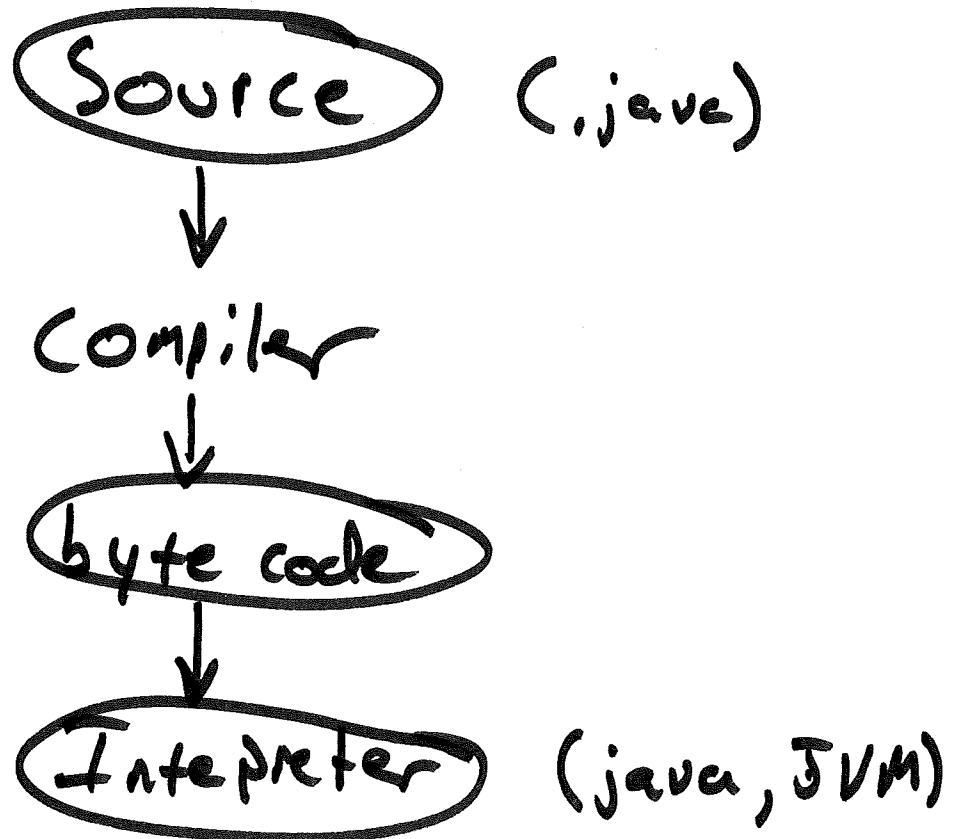
```
    // This is another comment!
```

```
    printf ("Hello World!\n");
```

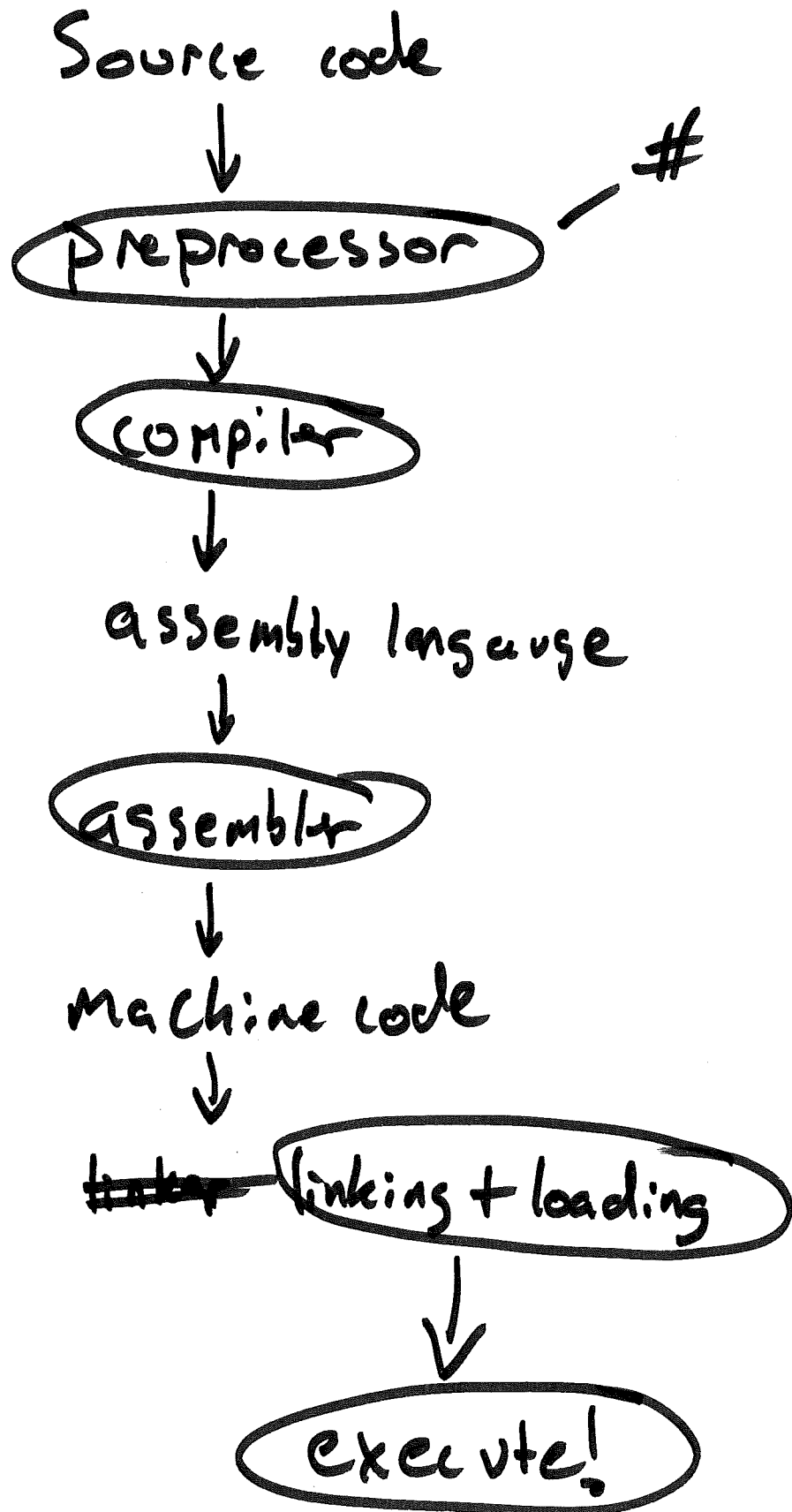
↳ System.out.print()

```
    return 0; }
```

- Java



- C & other High-level-languages (HLL)



- C pre processor (C PP → not C++)

- #

- #includes

- macro subst.

- conditionals

- Strips comments

- C types

- int : integer type (signed)
 - char : a single ASCII character
 - float : IEEE floating point
 - double : " " bigger
 - ~~short~~
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Qualifiers

- signed (signed int)
 - unsigned (unsigned int)
 - long (long int) } control size
 - short (short int) } size
 - const
 - restrict
- sizeof ()