JIT Compilation Focuses on the Code Being Used

In some cases,
- **interpreted languages** may be
- **partially compiled** to instructions
- **when executed**.

Usually, only the most frequently used parts of the program are compiled.

This approach is called **Just In Time (JIT) compilation**, and is often used in Java Virtual Machines (JVMs).

A Brief History of C

The **C programming language** was
- developed by Dennis Ritchie in 1972
- to simplify the task of writing Unix.

C has a transparent mapping to typical ISAs:
- easy to understand the mapping
- easy to teach a computer:
  C compiler (a program) converts a
  C program into instructions

C was first standardized in 1989 by ANSI.

Our Class Starts with C. Here's Why.

As mentioned,
- C is **easy to translate** (to LC-3, for example)
- so you can **understand exactly what a compiler does**.

C **syntax is similar to** that of **many useful languages**.

To write C++ well, **you must** be able to **write** the **C** part well.

Overview of the C Compilation Process