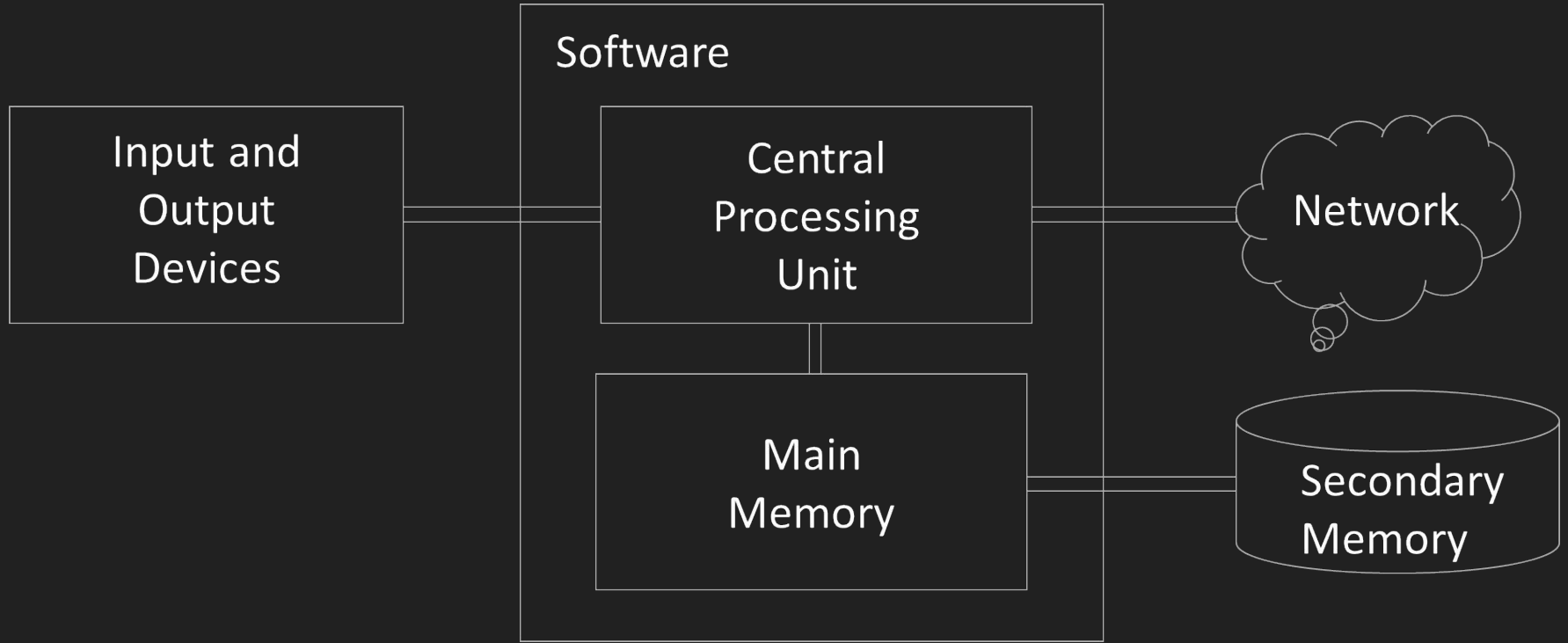


In the name of Allah

Hello Everybody

Let's get started!

Computer hardware architecture



Understanding programming

First, you need to know the programming language

Second, you need to tell a story

There are skill and art in constructing the story

In programming, our program is the “story” and the problem you are trying to solve is the “idea”

Let's talk about Languages

Machine Language

Machine language is the lowest-level programming language consisting of binary code that computers directly understand and execute.

01001000 01100101 01101100 01101100 01101111 00100000 01010111 01101111 01110010 01101100 01100100

Hello World

Assembly

Assembly language bridges the gap between machine language and high-level programming languages, offering human-readable instructions that are translated into machine code for computer execution.

High-level Languages

High-level languages provide programmers with a more user-friendly and abstracted approach to coding, utilizing English-like commands and structures that are eventually translated into machine code by the computer

Computer is just like a Dog

But it's already completely trained!

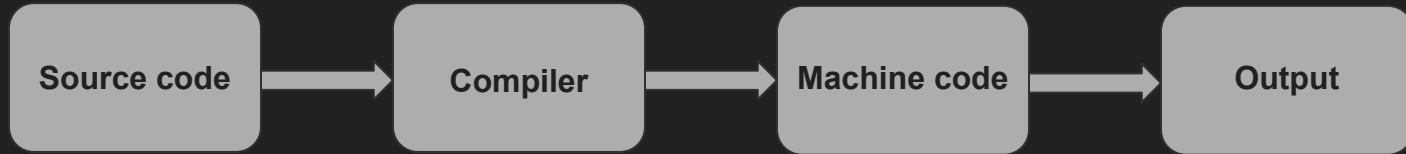
Who trained computers?

Let's talk about compiler

Compiler

A compiler is a software program that translates human-readable source code written in a programming language into machine code, enabling a computer to execute the program.

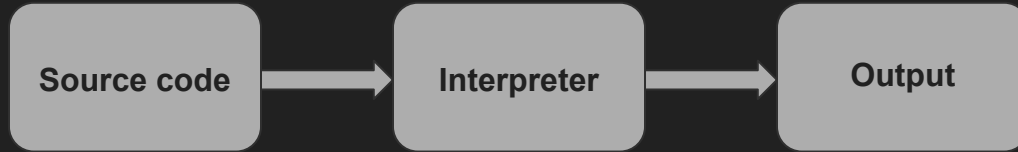
How compiler works?



Interpreter

An interpreter is a software program that directly executes human-readable source code written in a programming language line-by-line without producing a separate executable, translating the code into machine-understandable instructions on the fly.

How interpreter works?



Compiler VS. Interpreter

That's all for today!