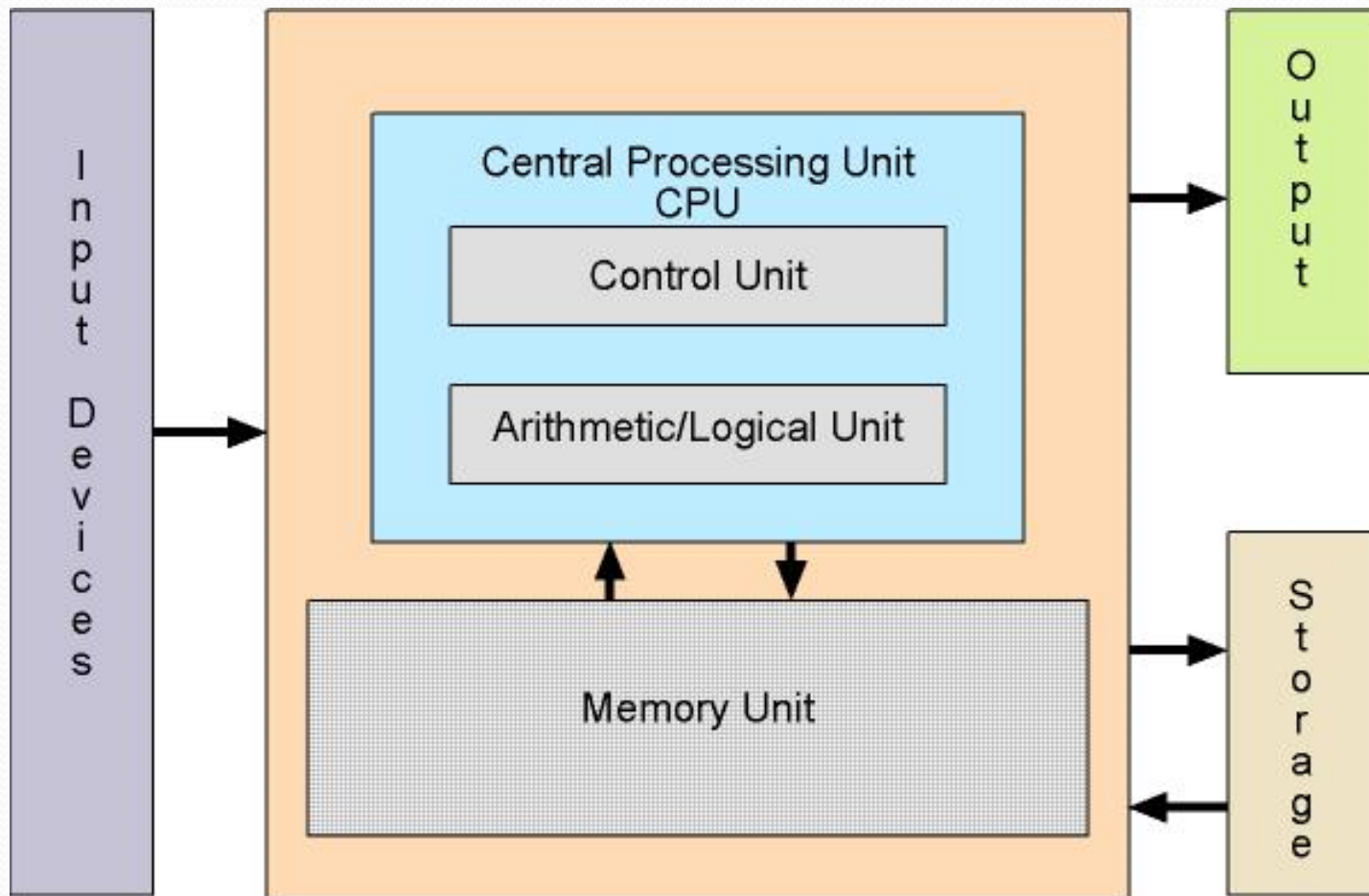# Elements of C

Block Diagram of Computer

Contents

- How C program gets executed
- C Tokens
- Variables
- Primary Data Types

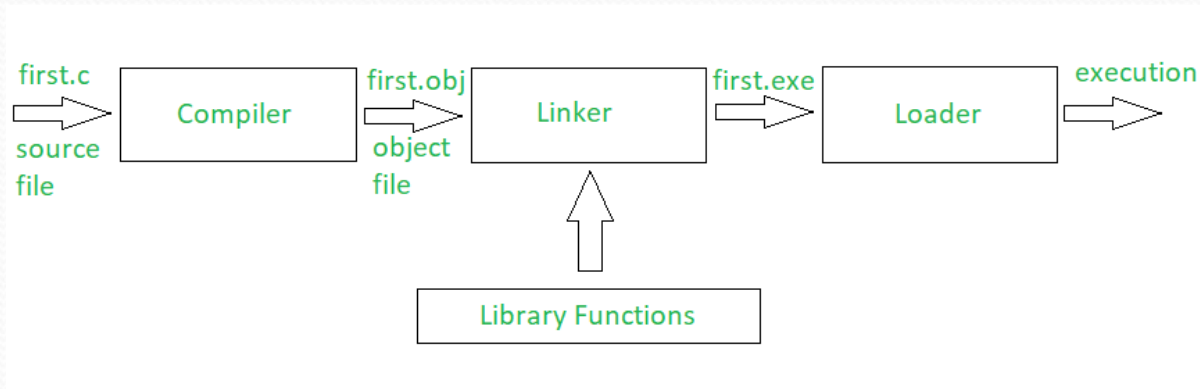# Basic example

```
#include<stdio.h>
int main(void)
{
    printf("Hello, World !");
    return 0;
}

$ gcc hello.c
$ ./a.out
Hello, World!
```
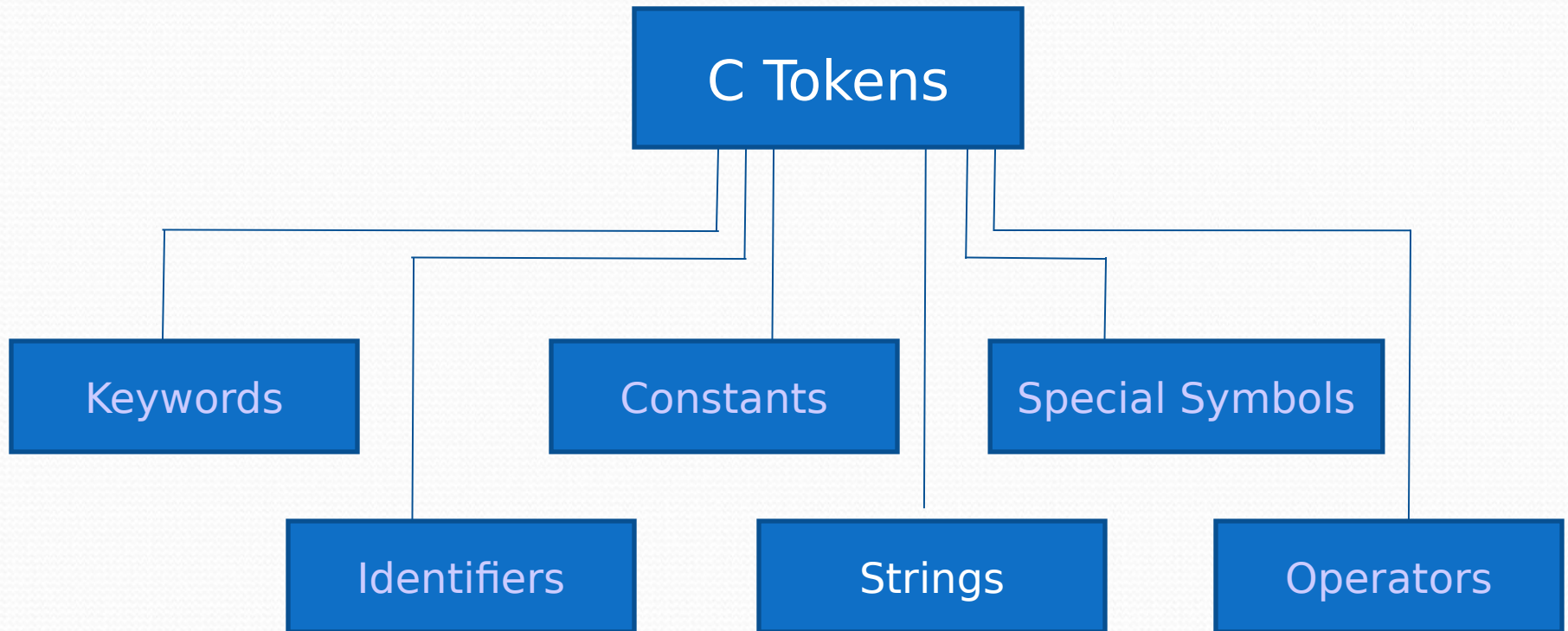
How does a C program executes?

Steps to execute a C program

- Enter the program using any editor
- Edit the source program
- Compile the code
- If syntax error exists then edit the program again
- If syntax error does not exist then Object code is created (filename.obj)
- Execute the Object code and check input data
- The code check for errors
- If Logic error exists then edit the program
- If Data error exists input data is again given to the program
- If code is error free then output appears on screen

• In a passage individual words and punctuation marks are called as tokens
• In C individual units are called *Tokens*

Variables

- Variable is a name used to store values
- Values assigned to variable can be changed during execution of a program

x

3

x=3

x

5

x=5