Introduction

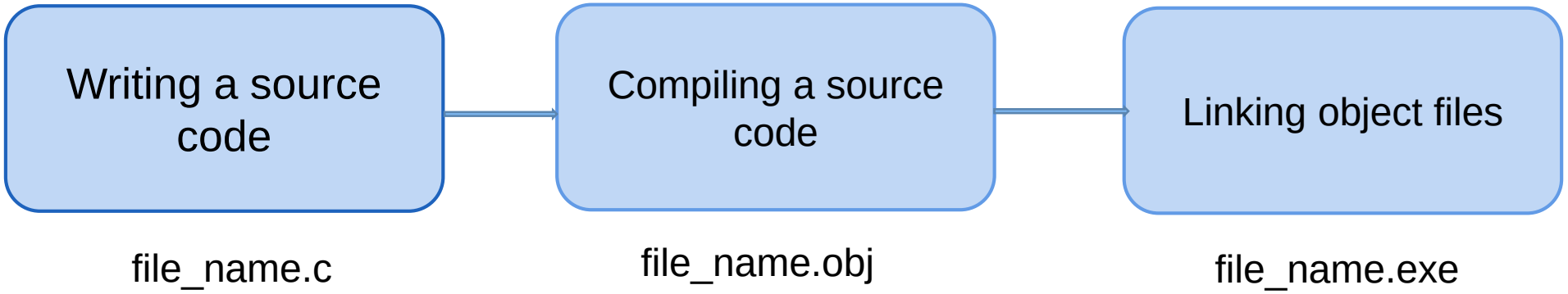
- C is a procedural programming language initially developed by Dennis Ritchie in the year 1972 at Bell Laboratories of AT&T Labs.
- **The main features of the C language include:**
  - General Purpose, Powerful and Portable
  - Modularity
  - Low-level Memory Access
  - C is a Middle Level, Case-Sensitive Language
  - Fast Speed
  - Clean Syntax

Where is C used?

- ‘C’ language is widely used in Embedded System.
- It is used for developing System Applications.
- It is widely used for developing Desktop Applications.
- It is used to develop Databases (ex.MySQL)
- It is used in developing an Operating System (ex.OS X, Windows)
- It is used to build Compilers.
- It is widely in IOT Applications.
- It is used to develop Browsers and their extensions.

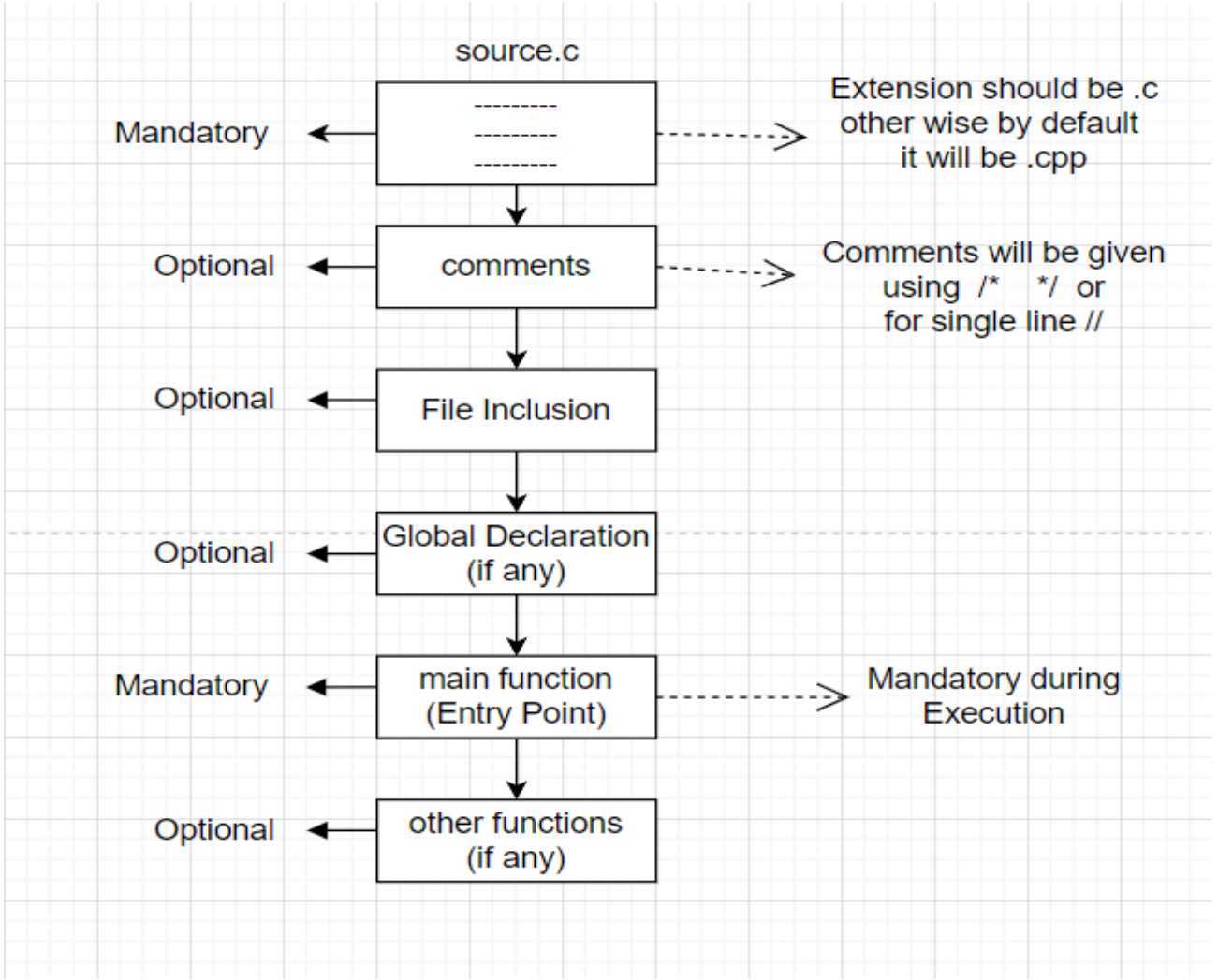
How C Programming Language works?

- C is a compiled language.
- A compiler is a special tool that compiles the program and converts it into the object file which is machine readable.
- After the successful compilation, the linker will combine different object files and creates a single executable file to run the program.



Get Started with C Programming

- Guidelines for C programming:



C Identifiers

- Identifiers are used to identify a particular element in a program.
- Each identifier must have a unique name.
- Rules for naming identifiers:
  - The first character must always be an alphabet or an underscore.
  - It should be formed using only letters, numbers, or underscore.
  - A keyword cannot be used as an identifier.
  - It should not contain any whitespace character.
  - The name must be meaningful.

C Variables

- Variable Declaration :

  Data_type identifier / variable ;

  eg. Int a;

- Assigning value to Variable :

  Identifier / variable = value;

  eg. a=10;

- Variable Initialization :

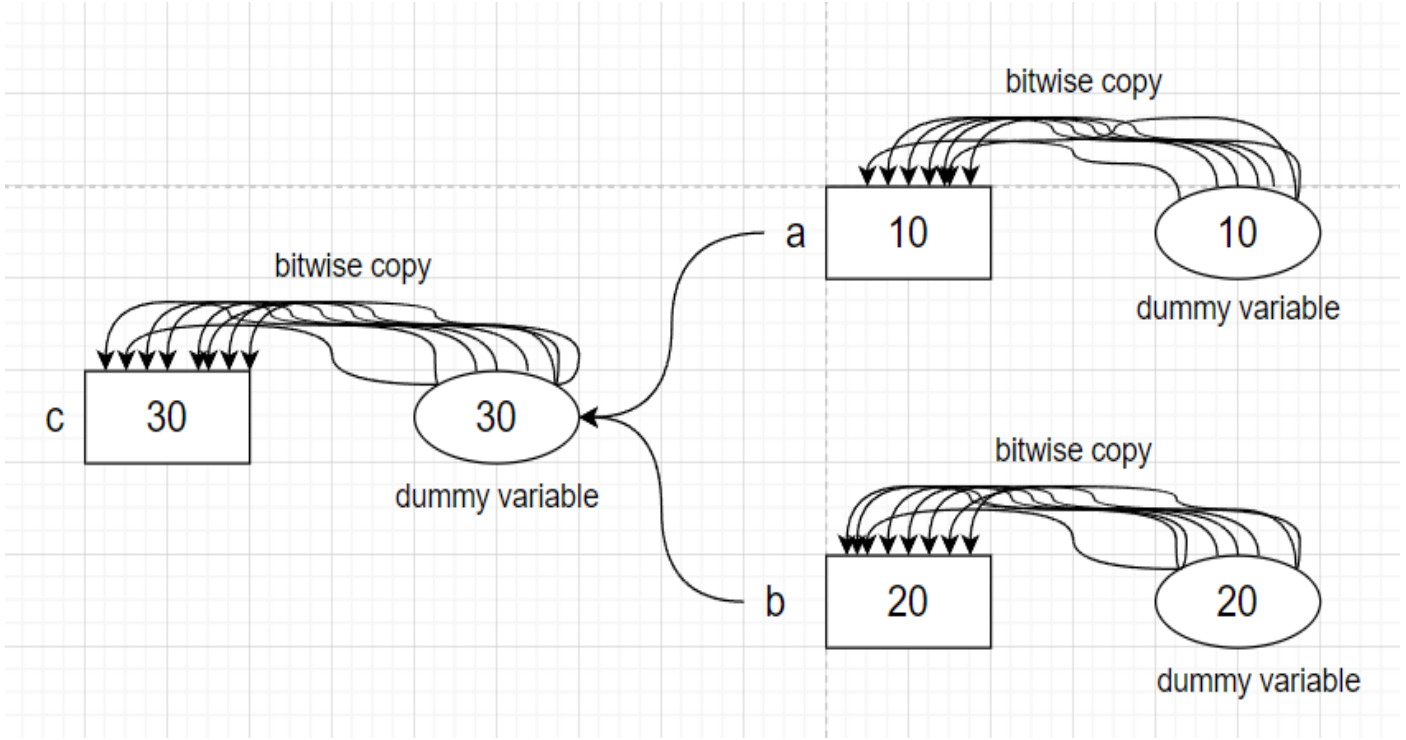
  Data_type identifier/variable = value;

  int a = 10;

C Variables

eg. int a = 10, b = 20 ;

int c = a+b ;



C Data Types

- Data type specifies the type of data that a variable can store.