

what is different data types in c programme

Data types in C program help define the kind of data a variable can store, like numbers or letters. Each data type tells the compiler how much memory to allocate and how to interpret the data.

For instance, numbers without decimal points use a type like int, while numbers with decimal points use float or double. Characters, which store single letters or symbols, use the char type.

Data types are essential for organizing information efficiently and ensuring your program works as expected by managing memory properly.

Types of Data Type in C Language

C program data types are classified into three main categories:

1. Basic Data Types: These include fundamental types like int (for integers), char (for characters), float (for floating-point numbers), and double (for double-precision floating-point numbers).
2. Derived Data Types: These are derived from basic data types and include arrays, pointers, and functions.
3. User-Defined Data Types: These are created by the programmer and include structures (struct), unions (union), and enumerations (enum).

Basic Data Types

int, char, float, double, void
derived data types
arrays, pointers, functions
user_defined data types
struct, union, enum, typedef