In C programming, a format specifier is a special sequence of characters used within input/output functions like `printf()` and `scanf()` to indicate the data type and format of the data being read or displayed. It instructs the compiler on how to interpret and handle the data.

Format specifiers begin with a percentage sign (`%`) followed by a character (or sequence of characters) that denotes the data type.

## Common Format Specifiers in C:

- `%d` or `%i`: For signed decimal integers (e.g., `int`).
- `%f`: For single-precision floating-point numbers (e.g., `float`).
- `%lf`: For double-precision floating-point numbers (e.g., `double`).
- `%c`: For a single character (e.g., `char`).
- `%s`: For a string of characters (e.g., `char[]`).
- `%u`: For unsigned decimal integers.
- `%ld`: For long signed decimal integers.
- `%lu`: For unsigned long decimal integers.
- `%x` or `%X`: For hexadecimal integers.
- `%o`: For octal integers.
- `%p`: For printing memory addresses (pointers).
- `%%`: To print a literal percentage sign