

Integer Types

The following table provides the details of standard integer types with their corresponding format, storage sizes and value ranges

| Type | Format | Storage size | Value range |
|----------------|--------------------------------|--------------|--|
| char | %c | 1 byte | -128 to 127 or 0 to 255 |
| unsigned char | %c (%hhu for numerical output) | 1 byte | 0 to 255 |
| int | %i or %d | 2 or 4 bytes | -32,768 to 32,767 or -2,147,483,648 to 2,147,483,647 |
| unsigned int | %u | 2 or 4 bytes | 0 to 65,535 or 0 to 4,294,967,295 |
| short | %hi | 2 bytes | -32,768 to 32,767 |
| unsigned short | %hu | 2 bytes | 0 to 65,535 |
| long | %li or %ld | 4 bytes | -2,147,483,648 to 2,147,483,647 |
| unsigned long | %lu | 4 bytes | 0 to 4,294,967,295 |

Floating-Point Types

The following table provide the details of standard floating-point types with their corresponding format, storage sizes and value ranges and their precision

| Type | Format | Storage size | Value range | Precision |
|--------|--|--------------|----------------------|-------------------|
| float | %f (digital notation) %g, %e (scientific notation) | 4 byte | 1.2E-38 to 3.4E+38 | 6 decimal places |
| double | %lf (digital notation) %lg, %le (scientific notation) | 8 byte | 2.3E-308 to 1.7E+308 | 15 decimal places |

The void Type

The void type specifies that no value is available. It is used in three different of situations

| Sr.No. | Types & Description |
|--------|--|
| 1 | Function returns as void There are various functions in C which do not return any value |
| 2 | Function arguments as void There are various functions in C which do not accept any parameter. |
| | Pointers to void A pointer of type void * represents the address of an object, but not its type. |