C Format Specifiers

Commonly used format specifiers in C with examples

1. %d : Integer (signed)
   Example: int age = 12; printf("%d", age); // Output: 12

2. %f : Float (decimal number)
   Example: float pi = 3.14159; printf("%f", pi); // Output: 3.141590
   Example: printf("%.2f", pi); // Output: 3.14

3. %c : Character
   Example: char grade = 'A'; printf("%c", grade); // Output: A

4. %s : String (char array)
   Example: char name[] = "Moe"; printf("%s", name); // Output: Moe

5. %u : Unsigned Integer (only positive)
   Example: unsigned int score = 100; printf("%u", score); // Output: 100

6. %x : Hexadecimal (lowercase)
   Example: int num = 255; printf("%x", num); // Output: ff

7. %p : Pointer (memory address)
   Example: int a = 5; printf("%p", (void*)&a); // Output: 0x7ffee37b4a2c

8. %% : Percent sign
   Example: printf("100%% Complete"); // Output: 100% Complete