```c
#include <inttypes.h>
#include <stdbool.h>
#include <stdio.h>
#include <stdlib.h>

#define PRINT_ADDRESS(ADR) printf(#ADR " = 0x%" PRIxPTR "\n", (intptr_t) ADR)

int main(void) {

    bool b = true;
    char c = 'A';
    int n = 255;
    double x = 123.456;

    printf("b = |%s| (%%s)\n\n", b ? "true" : "false");    // b = |true| (%s)

    printf("c = |%c| (%%c)\n", c);                          // c = |A| (%c)
    printf("c = |%2c| (%%2c)\n", c);                        // c = | A| (%2c)
    printf("c = |%-2c| (%%-2c)\n\n", c);                    // c = |A | (%-2c)

    printf("n = |%d| (%%d)\n", n);                          // n = |255| (%d)
    printf("n = |%i| (%%i)\n", n);                          // n = |255| (%i)
    printf("n = |%5d| (%%5d)\n", n);                        // n = |  255| (%5d)
    printf("n = |%2d| (%%2d)\n", n);                        // n = |255| (%2d)
    printf("n = |%05d| (%%05d)\n", n);                      // n = |00255| (%05d)
    printf("n = |%.5d| (%%.5d)\n", n);                      // n = |00255| (%.5d)
    printf("n = |%-5d| (%%-5d)\n", n);                      // n = |255  | (%-5d)
    printf("n = |%10.4d| (%%10.4d)\n", n);                  // n = |      0255| (%10.4d)
    printf("n = |%o| (%%o)\n", n);                          // n = |377| (%o)
    printf("n = |%#o| (%%#o)\n", n);                        // n = |0377| (%#o)
    printf("n = |%x| (%%x)\n", n);                          // n = |ff| (%x)
    printf("n = |%X| (%%X)\n", n);                          // n = |FF| (%X)
    printf("n = |%#x| (%%#x)\n", n);                        // n = |0xff| (%#x)
    printf("n = |%#X| (%%#X)\n\n", n);                      // n = |0XFF| (%#X)

    printf("x = |%f| (%%f)\n", x);                          // x = |123.456000| (%f)
    printf("x = |%7.2f| (%%7.2f)\n", x);                    // x = | 123.46| (%7.2f)
    printf("x = |%5f| (%%5f)\n", x);                        // x = |123.456000| (%5f)
    printf("x = |%.2f| (%%.2f)\n", x);                      // x = |123.46| (%.2f)
    printf("x = |%.0f| (%%.0f)\n", x);                      // x = |123| (%.0f)
    printf("x = |%05.0f| (%%05.0f)\n", x);                  // x = |00123| (%05.0f)
    printf("x = |%e| (%%e)\n", x);                          // x = |1.234560e+02| (%e)
    printf("x = |%E| (%%E)\n", x);                          // x = |1.234560E+02| (%E)
    printf("x = |%10.1e| (%%10.1e)\n\n", x);                // x = |   1.2e+02| (%10.1e)

    printf("x = |%f| (%%f)\n", 0.5);                        // x = |0.500000| (%f)
    printf("x = |%e| (%%e)\n", 0.5);                        // x = |5.000000e-01| (%e)
    printf("x = |%g| (%%g)\n", 0.5);                        // x = |0.5| (%g)
    printf("x = |%#g| (%%#g)\n", 0.5);                      // # => 6 chiffres significatifs
                                                            // x = |0.500000| (%#g)
    printf("x = |%#g| (%%#g)\n", 1.234567);                 // x = |1.23457| (%#g)
    printf("x = |%g| (%%g)\n", 0.00001);                    // notation scientifique
                                                            // si exp < -4 ou > 5
                                                            // x = |1e-05| (%g)
    printf("x = |%#g| (%%#g)\n\n", 0.00001);                // x = |1.00000e-05| (%#g)

    int* ptr = &n;
    printf("ptr = |%p| (%%p)\n", (void*) ptr);             // ptr = |000000000022FE34| (%p)
    printf("ptr = |0x%" PRIxPTR "| (PRIxPTR)\n", (intptr_t) ptr); // ptr = |0x22fe34| (PRIxPTR)
    PRINT_ADDRESS(&n);                                      // &n = 0x22fe34

    return EXIT_SUCCESS;
}
```