

| Classificazione Codifiche per Dimensione (x64) |                         |   |  |
|--|-------------------------|---|--|
| 8 bit  | 16 bit                  | 32 bit  | 64 bit   |
| char<br>unsigned char                          | short<br>unsigned short | int<br>unsigned short<br>long<br>unsigned long<br>float | long long<br>unsigned long long<br>double<br>char*<br>int*<br>float* |

| Classificazione Codifiche per Codifica                                |   |                                |
|---|---|--------------------------------|
| Binaria   | CA2                                       | IEEE 754                       |
| unsigned char<br>unsigned short<br>unsigned int<br>unsigned long long | char<br>short<br>int<br>long<br>long long | float<br>double<br>long double |

| Classificazione Range Interi |                               |                                 |
|------------------------------|-------------------------------|---------------------------------|
|                              | <b>Binaria</b>                | <b>CA2</b>                      |
|                              | $0 \div 2^{Nb}-1$             | $-2^{(Nb-1)} \div 2^{(Nb-1)}-1$ |
| char                         | $0 \div 255$                  | $-128 \div 127$                 |
| short                        | $0 \div 65.535 \text{ (65k)}$ | $-32k \div +32k$                |
| int / long                   | $0 \div 4G$                   | $-2G \div +2G$                  |
| long long                    | $0 \div 18E$                  | $-9E \div +9E$                  |

Refer to limits.h: CHAR\_MIN, CHAR\_MAX, UCHAR\_MIN, SHRT\_MIN, INT\_MIN, etc.

| Floating Point     |           |   |                           |
|--------------------|-----------|---|---------------------------|
|                    | <b>Nb</b> | <b>Range</b>  | <b>Precisione (cifre)</b> |
| <b>float</b>       | 32        | $\pm 1.18 \times 10^{-38}$ to $\pm 3.4 \times 10^{38}$      | 7                         |
| <b>double</b>      | 64        | $\pm 2.23 \times 10^{-308}$ to $\pm 1.80 \times 10^{308}$   | 16                        |
| <b>long double</b> | 80        | $\pm 3.65 \times 10^{-4951}$ to $\pm 1.18 \times 10^{4932}$ | 19                        |

Refer to float.h : FLT\_MAX, FLT\_MIN, DBL\_MAX, DBL\_MIN, LDBL\_MAX e LDBL\_MIN