

Data Types in ANSI C

Shams Parvez Arka

January 14, 2023

Type	MACRO	Data Type	Storage size	ranger
char	int8_t	8 bits	1 bytes	$-128 \dots 127$
unsigned char	uint8_t	8 bits	1 bytes	255
short	int16_t	16 bits	2 bytes	$-32768 \dots 32767$
unsigned short	uint16_t	16 bits	2 bytes	65535
int	int32_t	32 bits	4 bytes	$-2147483648 \dots 2147483647$
unsigned int	uint32_t	32 bits	4 bytes	4294967295
long	int64_t	64 bits	8 bytes	$-9223372036854775808 \dots$ 9223372036854775807
float	<i>blank</i>	32 bits	4 bytes	$1.17549 \times 10^{-38} \dots 3.40282 \times 10^{38}$
double	<i>blank</i>	64 bits	8 bytes	$2.22507 \times 10^{-308} \dots 1.79769 \times 10^{308}$
long double	<i>blank</i>	128 bits	10 bytes	$3.3621 \times 10^{-4932} \dots 1.18973 \times 10^{4932}$

n.b MACROS are defined in <stdint.h> library