Type Name	Bytes	Other Names	Range of Values	
int	4 bytes	signed	-2,147,483,648 to 2,147,483,647	
unsigned int	4 bytes	unsigned	0 to 4,294,967,295	
int8	1 byte	char	-128 to 127	
unsignedint8	1 byte	unsigned char	0 to 255	
int16	2 bytes	short, short int, signed short int	-32,768 to 32,767	
unsignedint16	2 bytes	unsigned short, unsigned short int	0 to 65,535	
int32	4 bytes	signed, signed int, int	-2,147,483,648 to 2,147,483,647	
unsignedint32	4 bytes	unsigned, unsigned int	0 to 4,294,967,295	
int64	8 bytes	long long, signed long long	-9,223,372,036,854,775,808 to	
unsignedint64	8 bytes	unsigned long long	0 to 18,446,744,073,709,551,615	
bool	1 byte	none	false or true	
char	1 byte	none	–128 to 127 by default	
signed char	1 byte	none	-128 to 127	
unsigned char	1 byte	none	0 to 255	
short	2 bytes	short int, signed short int	-32,768 to 32,767	
unsigned short	2 bytes	unsigned short int	0 to 65,535	
long	4 bytes	long int, signed long int	-2,147,483,648 to 2,147,483,647	
unsigned long	4 bytes	unsigned long int	0 to 4,294,967,295	
long long	8 bytes	none (but equivalent toint64)	-9,223,372,036,854,775,808 to	
			9,223,372,036,854,775,807	
unsigned long long 8 bytes		none (but equivalent to unsigned	0 to 18,446,744,073,709,551,615	
enum	varies	none	See Remarks later in this article	
float	4 bytes	none 3.4E +/- 38 (7 digits)		
double	8 bytes	none 1.7E +/- 308 (15 digits)		
long double same as		none Same as double		
wchar_t 2 bytes		wchar_t	0 to 65,535	

If the size of a data type is n bytes, it can store 2<sup>8n</sup> different values. This is called the data type's range. If size of an unsigned data type is n bytes, it ranges from 0 to 28n-1

If size of a signed data type is n bytes, it ranges from -2<sup>8n-1</sup> to 2<sup>8n-1</sup>-1 So, a short(usually 2 bytes) ranges from -32768 to 32767 and an unsigned short ranges from 0 to 65535