Wanna know size programmatically

Use "sizeof" operator

Note ; sizeof is a unary operator and not a function.

Output will be 4

Range

Upper and lower limit of some set of data.

For example : {0, 1, 2, 3, 4}

Rang : **o to 4**

Decimal number system : human understandable number system alo called base 10 number system .

Range: o to 9

For example : 5 6 8

Range of 4 bit data

2^3 2^2 2^1 2^0

4 bit data :   o o o o   minimum value = 0

1 1 1 1

Range of 4 bit data: 0 0 0 0 to 1 1 1 1   maximum value = 15

O   to   15

Maximum value formula : $2^n - 1$

Range of integer

2 bytes   unsigned range: 0 to 65535 (by applying: $2^n - 1$)

{16 bite}   singed range: -32768   to +32767

2's complement range : $-(2^{N-1})$ to $+(2^{n-1} - 1)$

Unsigned range: 0 to   4294967295 (by applying: $2^n - 1$)

Singed range: -2147483648   to   +2147483647