

3. (Fundamental Data type)

(type) 가

:

3.1 (Declaration), (Expression), (Assignment)

- (constants), (variable)

- C

- (Declaration) :

ex) int a ;
int a,b,c ;
float a,b,c

- Expression: combination of constants, variable, operator and function calls

ex) a + b
sqrt(2.0)
5.0*x - tan (9.0/x)

- (Assignment) : variable = expression ;

ex) a = 1 ; (O)
a = b + 1 ; (O)
a = 5.0*x - tan(9.0/x) ; (O)
x + 2 = 0 ; (X)

3.2

character type : char

integer type : short int, int, long int

floating point number type : float, double

3.3 Character Type

- 1 byte (0 -255) : ASCII Character Code

- (')

Ex) char c ;
c = 'P' ;

- hard-to-print characters : see page 113

3.4 (int) : 10 (decimal), 8 (octal), 16 (hexadecimal)

(1) 가 (signed integer) : , 0,

- short : 1 byte (-128 to 127)
- int : 2 byte (-32768 to 32767)
- long : 4 byte (-2147483648 to 2147483647)

(2) 가 (unsigned integer) : 0,

가 가 .

unsigned .

- unsigned short : 1 byte (0 to 255)
- unsigned int : 2 byte (0 to 65535)
- unsigned long : 4 byte (0 to 4294967295)

3.5 (Floating Point Number Type)

- float (4 byte) : (machine dependent)
- double and long double : 가 가 .

Ex) float p ;
p = 1.0 ;
p = 1.E0 ;
p = 1.34E -2;

3.6 typedef

- (Datatype)
- ex) typedef char uppercase ;
typedef int INCHES, FEET ;
typedef unsigned long size_t ;

3.7 sizeof operator

form : sizeof (object)

see examples on page 123