
프로그래밍을 통한
논리적 사유 연습

11장.함수
(표준 함수)

표준 함수

abs

Calculates the absolute value.

Routine	Required Header
abs	<stdlib.h> or <math.h>

```
INT abs( int n );
```

Parameters

n
Integer value

Libraries

All versions of the C run-time libraries.

Return Values

The **abs** function returns the absolute value of its parameter. There is no error return.

표준 함수

fabs

Calculates the absolute value of the floating-point argument.

Function	Required Header
fabs	<math.h>

```
double fabs( double x );
```

Parameters

x
Floating-point value

Libraries

All versions of the C run-time libraries.

Return Values

fabs returns the absolute value of its argument. There is no error return.

표준 함수

labs

Calculates the absolute value of a long integer.

Routine	Required Header
labs	<stdlib.h> and <math.h>

```
long labs( long n );
```

Parameters

n
Long-integer value

Libraries

All versions of the C run-time libraries.

Return Values

The labs function returns the absolute value of its argument. There is no error return.

표준 함수

pow

Calculates *x* raised to the power of *y*.

double pow(double *x*, double *y*);

Routine	Required Header	Compatibility
pow	<math.h>	ANSI, Win 95, Win NT

For additional compatibility information, see Compatibility in the Introduction.

Libraries

LIBC.LIB	Single thread static library, retail version
LIBCMT.LIB	Multithread static library, retail version
MSVCRT.LIB	Import library for MSVCRT.DLL, retail version

Return Value

pow returns the value of x^y. No error message is printed on overflow or underflow.

Values of x and y	Return Value of pow
$x < > 0$ and $y = 0.0$	1
$x = 0.0$ and $y = 0.0$	1
$x = 0.0$ and $y < 0$	INF

표준 함수

sqrt

Calculates the square root.

double sqrt(double *x* **);**

Routine	Required Header	Compatibility
sqrt	<math.h>	ANSI, Win 95, Win NT

For additional compatibility information, see Compatibility in the Introduction.

Libraries

LIBC.LIB	Single thread static library, retail version
LIBCMT.LIB	Multithread static library, retail version
MSVCRT.LIB	Import library for MSVCRT.DLL, retail version

Return Value

The **sqrt** function returns the square-root of *x*. If *x* is negative, **sqrt** returns an indefinite (same as a quiet NaN). You can modify error handling with _matherr.

Parameter

x

Nonnegative floating-point value

표준 함수

srand

Sets a random starting point.

void srand(unsigned int *seed* **);**

Routine	Required Header	Compatibility
srand	<stdlib.h>	ANSI, Win 95, Win NT

For additional compatibility information, see Compatibility in the Introduction.

Libraries

LIBC.LIB	Single thread static library, retail version
LIBCMT.LIB	Multithread static library, retail version
MSVCRT.LIB	Import library for MSVCRT.DLL, retail version

Return Value

None

Parameter

seed
Seed for random-number generation

표준 함수

rand

Generates a pseudorandom number.

int rand(void);

Routine	Required Header	Compatibility
rand	<stdlib.h>	ANSI, Win 95, Win NT

For additional compatibility information, see Compatibility in the Introduction.

Libraries

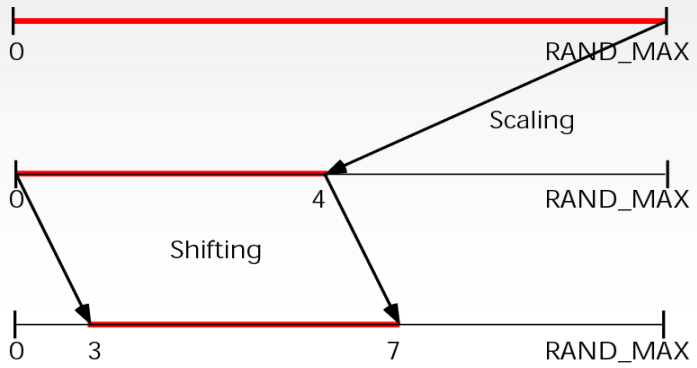
LIBC.LIB	Single thread static library, retail version
LIBCMT.LIB	Multithread static library, retail version
MSVCRT.LIB	Import library for MSVCRT.DLL, retail version

Return Value

rand returns a pseudorandom number, as described above. There is no error return.

표준 함수

1. **int rand(void);**
   - ❑ **의사 난수 발생**
   - ❑ 0 ~ 32767
   - ❑ srand((unsigned)time(NULL))//<time.h>
   - ❑ <stdlib.h>



2. **void srand(unsigned int *seed*);**
   - ❑ **난수의 초기값 지정**
   - ❑ <cstdlib>
   - ❑ **난수의 크기 조정**
     - ➢ RAND_MAX
     - ➢ rand()%((max+1)-min)+min

```
#include<stdio.h>
#include<stdlib.h>
#include<time.h>

int main()
{
   srand((unsigned)time(NULL));
   printf("%d \n", rand());
   return 0;
}
```