

Random Obtain pseudo-random signed integer

#include <Quickdraw.h>

Quickdraw

short **Random()**;

Random generates and returns a different pseudo-random number each time it is called. The return value ranges from -32767 to 32767.

Returns: a signed integer; the next in a sequence of pseudo-random values, uniformly distributed over the range -32767 to 32767.

Notes: To obtain a number within a selected range multiply the return value by the range, divide by 65536, and add the desired minimum value. See the Example, below.

The numbers are generated in a sequence based upon the starting, or "seed" value, which is stored in the global 32-bit variable randSeed.

The seed is initialized to 1 by **InitGraf**. If you start a sequence by storing a value in randSeed, you can restart the same sequence by setting randSeed to the same value. A more typical operation is to start the sequence with some relatively unguessable value, such as the system time:

```
GetDateTime( &randSeed );           /* store 32-bit value in seed */
theRand = Random();                 /* get a random number */
```

The Quickdraw global variable randSeed can also be used as a seed to start a pseudo-random sequence.

Example

/* example function returns value between min and max */

#include <Quickdraw.h>

unsigned short RangedRdm(unsigned short min, unsigned short max)

/* assume that min is less than max */

```
{
    unsigned    qdRdm; /* treat return value as 0-65536 */
    long        range, t;

    qdRdm = Random();
    range = max - min;
    t = (qdRdm * range) / 65536;           /* now 0 <= t <= range */
    return( t+min );
}
```