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uniform_int_distribution
uniform_int_distribution::(constructor)
member functions:
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public member function

std::uniform\_int\_distribution::operator()<random>

```
(1) template<class URNG>
    result_type operator()(URNG& g);
(2) template<class URNG>
    result_type operator()(URNG& g, const param_type& parm);
```

**Generate random number**

Returns a new random number that follows the distribution's parameters associated to the object (version 1) or those specified by *parm* (version 2).

The generator object (*g*) supplies uniformly-distributed random integers through its `operator()` member function. The `uniform_int_distribution` object transforms the values obtained this way so that successive calls to this member function with the same arguments produce values that follow a *uniform distribution* within the appropriate range.

**Parameters**

*g*

A uniform random number generator object, used as the source of randomness.  
URNG shall be a *uniform random number generator* type, such as one of the standard generator classes.

*parm*

An object representing the distribution's parameters, obtained by a call to member function `param`.  
`param_type` is a member type.

**Return value**

A new random number.  
`result_type` is a member type, defined as an alias of the first class template parameter (`IntType`).

**Example**

```
1 // uniform_int_distribution::operator()
2 #include <iostream>
3 #include <chrono>
4 #include <random>
5
6 int main()
7 {
8     // construct a trivial random generator engine from a time-based seed:
9     unsigned seed = std::chrono::system_clock::now().time_since_epoch().count();
10    std::default_random_engine generator (seed);
11
12    std::uniform_int_distribution<int> distribution(1,10);
13
14    std::cout << "some random numbers between 1 and 10: ";
15    for (int i=0; i<10; ++i)
16        std::cout << distribution(generator) << " ";
17
18    std::cout << std::endl;
19
20    return 0;
21 }
```

Possible output:

some random numbers between 1 and 10: 3 2 1 2 7 10 6 2 4 8

**Complexity**

Amortized constant (a constant number of invocations of `g.operator()`).

**See also**

`uniform_int_distribution::param` Distribution parameters (public member function)

```
uniform_int_distribution::operator()  
uniform_int_distribution::param  
uniform_int_distribution::reset  
non-member functions:  
operator<<  
operator>>  
relational operators
```

