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class template

std::greater <functional>

template <class T> struct greater;

Function object class for greater-than inequality comparison

Binary function object class whose call returns whether the its first argument compares *greater* than the second (as returned by operator >).

Generically, *function objects* are instances of a class with member function operator() defined. This member function allows the object to be used with the same syntax as a function call.

It is defined with the same behavior as:

C++98 C++11

```
1 template <class T> struct greater : binary_function <T,T,bool> {
2     bool operator() (const T& x, const T& y) const {return x>y;}
3 };
```

Objects of this class can be used on standard algorithms such as [sort](#), [merge](#) or [lower_bound](#).

Template parameters

T

Type of the arguments to compare by the functional call.
The type shall support the operation (operator>).

Member types		
member type	definition	notes
first_argument_type	T	Type of the first argument in member operator()
second_argument_type	T	Type of the second argument in member operator()
result_type	bool	Type returned by member operator()

Member functions

bool operator() (const T& x, const T& y)

Member function returning whether the first argument compares greater than the second (x>y).

Example

```
1 // greater example
2 #include <iostream> // std::cout
3 #include <functional> // std::greater
4 #include <algorithm> // std::sort
5
6 int main () {
7     int numbers[]={20,40,50,10,30};
8     std::sort (numbers, numbers+5, std::greater<int>());
9     for (int i=0; i<5; i++)
10         std::cout << numbers[i] << ' ';
11     std::cout << '\n';
12     return 0;
13 }
```

Edit & Run

Output:

50 40 30 20 10

See also	
equal_to	Function object class for equality comparison (class template)
not_equal_to	Function object class for non-equality comparison (class template)
less	Function object class for less-than inequality comparison (class template)
greater_equal	Function object class for greater-than-or-equal-to comparison (class template)
less_equal	Function object class for less-than-or-equal-to comparison (class template)