Function Objects

Predicates: A *predicate* is a function object (or a function) that returns a bool.

equal_to	binary predicate: arg1 == arg2
not_equal_to	binary predicate: arg1 != arg2
greater	binary predicate: arg1 > arg2
less	binary predicate: arg1 < arg2
greater_equal	binary predicate: arg1 >= arg2
less_equal	binary predicate: arg1 <= arg2
logical_and	binary predicate: arg1 && arg2
logical_or	binary predicate: arg1 || arg2
logical_not	unary predicate: !arg

Arithmetic Function Objects:

plus	binary function: arg1 + arg2
minus	binary function: arg1 – arg2
multiplies	binary function: arg1 * arg2
divides	binary function: arg1 / arg2
modulus	binary function: arg1 % arg2
negate	unary function: –arg

Binders, Adapters, and Negaters: A *binder* allows a two-argument function object to be used as a single-argument function by binding one argument to a value; a *member function adapter* allows a member function to be used as an argument to algorithms; a *pointer to function adapter* allows a pointer to function to be used as an argument to algorithms; and a *negater* allows to express the opposite of a predicate. Collectively, these function objects are referred to as *adapters*. That is, an adapter takes a function argument and produces a new function from it. **These functions are deprecated, use the bind ( ) function instead**.

bind2nd (y)	binder2nd	call a binary function with y as 2nd argument
bind1st (x)	binder1st	call a binary function with x as 1st argument
mem_fun ( )	mem_fun_t	call a 0-arg member through a pointer
	mem_fun1_t	call a unary member through a pointer
	const mem_fun_t	call a 0-arg const member through a pointer
	const_mem_fun1_t	call a unary const member through a pointer
mem_fun_ref ( )	mem_fun_ref_t	call a 0-arg member through a reference
	mem_fun1_ref_t	call a unary member through a reference
	const_mem_fun_ref_t	call a 0-arg const member through a reference
	const_mem_fun1_ref_t	call a unary const member through a reference
ptr_fun ( )	pointer_to_unary_function	call a unary pointer to a function
ptr_fun ( )	pointer_to_binary_function	call a binary pointer to a function
not1 ( )	unary_negate	negate a unary predicate
not2 ( )	binary_negate	negate a binary predicate