

```

/* The following code example is taken from the book
 * "The C++ Standard Library – A Tutorial and Reference"
 * by Nicolai M. Josuttis, Addison-Wesley, 1999
 *
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 * warranty, and with no claim as to its suitability for any purpose.
 */
namespace boost {

/*****
 * type nullary_function
 * – as supplement to unary_function and binary_function
 *****/
template <class Result>
struct nullary_function {
    typedef Result result_type;
};

/*****
 * ptr_fun for functions with no argument
 *****/
template <class Result>
class pointer_to_nullary_function : public nullary_function<Result>
{
protected:
    Result (*ptr) ();
public:
    pointer_to_nullary_function() {}
    explicit pointer_to_nullary_function(Result (*x)()) : ptr(x) {}
    Result operator()() const {
        return ptr();
    }
};

template <class Result>
inline pointer_to_nullary_function<Result> ptr_fun(Result (*x)())
{
    return pointer_to_nullary_function<Result>(x);
}

}

```