

Library-defined Operators Solutions

Library-defined operator objects

- Explain what the following code represents

`std::less<T>`

- `std::less<T>` is a generic functional operator
 - It is a functor
 - We can create a functional operator object and call it with two arguments of type T
 - It will call the `<` operator of T
- Which header file is `std::less` defined in?
 - `std::less` is defined in `<functional>`

Default template argument

- Using the techniques in this lecture
 - Write a template class with two data members and a member template
 - The member template compares the data members of the class and returns the result
 - The comparison will use a callable function object which is provided by the member template's caller
 - If no function object is provided, use the < operator of the data members instead
 - (Similar to STL algorithms like `std::sort`)
 - Write a program and test your class