CPP Problem Design

Subject: Set Exercise

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Main testing concept: STL

Basics	Functions
■ C++ BASICS	□ SEPARATE COMPILATION AND NAMESPACES
□ FLOW OF CONTROL	□ STREAMS AND FILE I/O
□ FUNCTION BASICS	□ RECURSION
□ PARAMETERS AND OVERLOADING	□ INHERITANCE
□ ARRAYS	□ POLYMORPHISM AND VIRTUAL FUNCTIONS
□ STRUCTURES AND CLASSES	□ TEMPLATES
□ CONSTRUCTORS AND OTHER TOOLS	□ LINKED DATA STRUCTURES
□ OPERATOR OVERLOADING, FRIENDS,AND REFERENCES	□ EXCEPTION HANDLING
	■ STANDARD TEMPLATE LIBRARY
□ STRINGS	□ PATTERNS AND UML
□ POINTERS AND DYNAMIC ARRAYS	

Description:

Consider a text file of names with one name per line, and the names have been collected from several different sources.
A sample is shown in the following:

Brooke Trout
Dinah Soars
Jed Dye
Brooke Trout
Jed Dye
Paige Turner

There are duplicate names in the file. We would like to generate an invitation list but do not want to send multiple invitations to the same person. Write a program that eliminates the duplicate names by using the **set** template class. Read each name from the file (name.txt) and add it to the set, then output all names in the set to generate the invitation list without duplicates.

Input:
Read the file named "name.txt".

Output:
Output on console.

Sample Input / Output：

Sample Input	Sample Output
name.txt	Brooke Trout Dinah Soars Jed Dye Paige Turner

■ **Easy, Only basic programming syntax and structure are required.**

□ **Medium, Multiple programming grammars and structures are required.**

□ **Hard, Need to use multiple program structures or more complex data types.**

Expected solving time:
10 minutes

Other notes: