

# CPP Problem Design Example

**Subject:** Find the largest and smallest

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**Main testing concept:** 數字大小比較

## Basics

- ☒ C++ BASICS
- ☐ FLOW OF CONTROL
- ☐ FUNCTION BASICS
- ☐ PARAMETERS AND OVERLOADING
- ☐ ARRAYS
- ☐ STRUCTURES AND CLASSES
- ☐ CONSTRUCTORS AND OTHER TOOLS
- ☐ OPERATOR OVERLOADING, FRIENDS, AND REFERENCES
- ☐ STRINGS
- ☐ POINTERS AND DYNAMIC ARRAYS

## Functions

- ☐ SEPARATE COMPILATION AND NAMESPACES
- ☐ STREAMS AND FILE I/O
- ☐ RECURSION
- ☐ INHERITANCE
- ☐ POLYMORPHISM AND VIRTUAL FUNCTIONS
- ☐ TEMPLATES
- ☐ LINKED DATA STRUCTURES
- ☐ EXCEPTION HANDLING
- ☐ STANDARD TEMPLATE LIBRARY
- ☐ PATTERNS AND UML

## Description:

Find the largest and smallest of four integers entered by the user.

## Input:

Enter four integers separated by blanks.

The input is unlimited input until EOF is read.

## Output:

Output the largest and smallest, and follow the sample format.

## Sample Input / Output :

| Sample Input                           | Sample Output                             |
|--|---|
| 21 43 10 35                            | Largest: 43<br>Smallest: 10               |
| -451 0 45641 2147483646                | Largest: 2147483646<br>Smallest: -451     |
| -214783646 -214783646 9456123 95124446 | Largest: 95124446<br>Smallest: -214783646 |

- ☒ 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 complex data types.

## Expected solving time:

10 minutes

## Other notes: