

## LAB REPORT 实验报告

Lab Title	Strings			Lab No.	08
Stud. Name		Major	CST	Class	
Student ID			Date		

**Lab description/objectives:**  
Write a C program to sort a string array in ascending order.  
Test Data: "resource"  
Expected Output: "ceeorrsu"

**Source code:**  

```
#include <stdio.h>
#include <string.h>
#define MAXLEN 50
int main()
{
    char str[MAXLEN];
    scanf("%s", str);
    for (int i = 0; i < strlen(str) - 1; i++) {
        for (int j = 0; j < strlen(str) - 1 - i; j++) {
            if (str[j] > str[j + 1]) {
                char temp = str[j];
                str[j] = str[j + 1];
                str[j + 1] = temp;
            }
        }
    }
    printf("The string in ascending order is \"%s\\n\", str);
    return 0;
}
```

**Program outputs:**

```
h3art — 80x24
Launching: '/Users/h3art/Projects/homework/LAB08_bubblesort'
Working directory: '/Users/h3art/Projects/homework'
1 arguments:
argv[0] = '/Users/h3art/Projects/homework/LAB08_bubblesort'
resource
The string in ascending order is "ceeorrsu".
Process exited with status 0
logout
Saving session...
...copying shared history...
...saving history...truncating history files...
...completed.

[进程已完成]
```

```
h3art — 80x24
Launching: '/Users/h3art/Projects/homework/LAB08_bubblesort'
Working directory: '/Users/h3art/Projects/homework'
1 arguments:
argv[0] = '/Users/h3art/Projects/homework/LAB08_bubblesort'
excellent
The string in ascending order is "ceeellntx".
Process exited with status 0
logout
Saving session...
...copying shared history...
...saving history...truncating history files...
...completed.

[进程已完成]
```

**Discussion:**

1. Most difficult parts
2. Bugs and/or Errors