

insertStr

Write a C function **insertStr()** that inserts the characters of string **s** into string **a** according to alphabetical order. The characters in string **a** are ordered alphabetically, while the characters in string **s** may **not** be ordered alphabetically. For example, if **a** is "cehiknqtw" and **s** is "fbla", then the updated string **a** will be "abcefhiklnqtw" after the execution of the insertStr() function. In addition, the string **a** will also be returned to the calling function.

A sample program template is given below:

```
#include <stdio.h>
#include <string.h>
char *insertStr(char *a, char *s);
int main()
{
    char a[40],s[40];

    printf("Enter the string a: \n");
    scanf("%s",a);
    printf("Enter the string s: \n");
    scanf("%s",s);
    insertStr(a,s);
    printf("insertStr(): %s",a);
    return 0;
}
char *insertStr(char *a, char *s)
{
    /* Write your code here */
}
```

Some test input and output sessions are given below:

(1) Test Case 1:

```
Enter the string a:
cehiknqtw
Enter the string s:
fbla
insertStr(): abcefhiklnqtw
```

(2) Test Case 2:

```
Enter the string a:
cehiknqtw
Enter the string s:
a
insertStr(): acehiknqtw
```

(3) Test Case 3:

```
Enter the string a:
cehiknqtw
Enter the string s:
zy
insertStr(): cehiknqtwy
```

(4) Test Case 4:

```
Enter the string a:
```

```
cehiknqtw
Enter the string s:
eh
insertStr(): ceehhiknqtw
```