

mergeStr

Write a C function `mergeStr()`, which takes in 3 parameters ***a***, ***b*** and ***c***, merges two alphabetically ordered character strings ***a*** and ***b*** into character string ***c*** according to alphabetical order. For example, if ***a*** is "agikmpq" and ***b*** is "bcdefhjl nr", then the resultant string ***c*** will be "abcdefghijklmnpqr". The string ***c*** will be passed to the caller via call by reference.

A sample program template is given below:

```
#include <stdio.h>
#include <string.h>
void mergeStr(char *a, char *b, char *c);
int main()
{
    char a[80],b[80];
    char c[80];

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

Some test input and output sessions are given below:

(1) Test Case 1:

```
Enter the first string a:
ace
Enter the second string b:
bdg
mergeStr(): abcdeg
```

(2) Test Case 2:

```
Enter the first string a:
agikmpq
Enter the second string b:
bcdefhjl nr
mergeStr(): abcdefghijklmnpqr
```

(3) Test Case 3:

```
Enter the first string a:
afk
Enter the second string b:
afk
mergeStr(): aaffkk
```

(4) Test Case 4:

```
Enter the first string a:
```

```
afkm  
Enter the second string b:  
bbbggg  
mergeStr(): abbbfgggkm
```