compareChar

Write a C function compareChar() that accepts two strings **str1** and **str2** as parameters, compares the two strings character by character according to the same index positions, stores the larger character of the two into the string **str3** which is also a parameter of the function. You may assume that the two strings contain only lower case letter characters. For example, if **str1**="big" and **str2**="small", then the resultant string **str3** is "smgll".

A sample program template is given below:

```c
#include <stdio.h>
#include <string.h>
void compareChar(char *str1, char *str2, char *str3);
int main()
{
    char str1[80],str2[80],str3[80];

    printf("Enter the first string: \n");
    scanf("%s",str1);
    printf("Enter the second string: \n");
    scanf("%s",str2);
    compareChar(str1, str2, str3);
    printf("compareChar(): %s\n", str3);
    return 0;
}
void compareChar(char *str1, char *str2, char *str3)
{
    /* Write your code here */
}
```

Some test input and output sessions are given below:

(1) Test Case 1:
```
Enter the first string:
big
Enter the second string:
small
compareChar(): smgll
```

(2) Test Case 2:
```
Enter the first string:
happy
Enter the second string:
poor
compareChar(): popry
```

(3) Test Case 3:
```
Enter the first string:
excellent
Enter the second string:
bad
compareChar(): exdellent
```

(4) Test Case 4:
```
Enter the first string:
```

```
daddy
Enter the second string:
mommy
compareChar(): mommy
```

```c
#include <stdio.h>
#include <string.h>
void compareChar(char *str1, char *str2, char *str3);
int main()
{
    char str1[80],str2[80],str3[80];

    printf("Enter the first string: \n");
    scanf("%s",str1);
    printf("Enter the second string: \n");
    scanf("%s",str2);
    compareChar(str1, str2, str3);
    printf("compareChar(): %s\n", str3);
    return 0;
}
void compareChar(char *str1, char *str2, char *str3)
{
    int len1,len2;
    int i=0,j=0,k=0;

    len1 = strlen(str1);
    len2 = strlen(str2);

    while (str1[i]!='\0'&&str2[j]!='\0')
    {
        if(str1[i]>=str2[j])
        {
            str3[k] = str1[i];
            i++;
            j++;
            k++;
        }
        else if(str1[i]<str2[j])
        {
            str3[k] = str2[j];
            i++;
            j++;
            k++;
        }
    }
    while(i<len1)
    {
        str3[k] = str1[i];
        i++;
        k++;
    }
    while(j<len2)
    {
        str3[k] = str2[j];
        j++;
        k++;
    }
    str3[k] = '\0';
}
```