## strIntersect

Write the C function strIntersect() that takes in three strings str1, str2 and str3 as parameters, stores the same characters that appeared in both str1 and str2 into the string, and returns str3 to the calling function via call by reference. For example, if str1 is "abcdefghijk" and str2 is "123i4bc78h9", then str3 is "bchi" will be returned to the calling function after executing the function. If there is no common characters in the two strings, str3 will be a null string. You may assume that each string contains unique characters in the string, i.e. the characters contained in the same string will not be repeated. The function prototype is:

```
void strIntersect(char *str1, char *str2, char *str3);
A sample C program to test the function is given below:
   #include <stdio.h>
   void strIntersect(char *str1, char *str2, char *str3);
   int main()
      char str1[50],str2[50],str3[50];
      printf("Enter str1: \n");
      scanf("%s",str1);
      printf("Enter str2: \n");
      scanf("%s",str2);
      strIntersect(str1, str2, str3);
      if (*str3 == '\0')
         printf("strIntersect(): null string\n");
         printf("strIntersect(): %s\n", str3);
      return 0;
   void strIntersect(char *str1, char *str2, char *str3)
      /* Write your code here */
```

Some sample input and output sessions are given below:

```
(1) Test Case 1:
   Enter str1:
   abcde
   Enter str2:
   strIntersect(): cde
(2) Test Case 2:
   Enter strl:
   abcdefghijk
   Enter str2:
   akdhf
   strIntersect(): adfhk
(3) Test Case 3:
   Enter str1:
   abc
   Enter str2:
   def
   strIntersect(): null string
```