String Operations using pointers

```c
#include <stdio.h>
#include <string.h>

// Function to copy one string to another using pointers
void copyString(char *x, const char *y) {
    while (*y != '\0') {
        *x = *y;
        y++;
        x++;
    }
    *x = '\0';
}

// Function to calculate the length of a string using pointers
int stringLength(const char *str) {
    int length = 0;
    while (*str != '\0') {
        length++;
        str++;
    }
    return length;
}

// Function to concatenate two strings using pointers
void concatString(char *x, const char *y) {
    while (*x != '\0') {
        x++;
    }
    while (*y != '\0') {
        *x = *y;
        y++;
        x++;
    }
    *x = '\0';
}

// Function to reverse a string using pointers
void reverseString(char *str) {
    char *start = str;
    char *end = str + stringLength(str) - 1;
    while (start < end) {
        char temp = *start;
        *start = *end;
        *end = temp;
        start++;
        end--;
    }
}

// Function to compare two strings using pointers
int compareString(const char *x, const char *y) {
```

String Operations using pointers

```c
    while (*x != '\0' && *y != '\0') {
       if (*x != *y) {
          return *x - *y;
       }
       x++;
       y++;
    }
    return *x - *y;
}

int main() {
    char str1[100], str2[100], result[200];

    printf("Enter the first string: ");
    scanf("%s", str1);

    printf("Enter the second string: ");
    scanf("%s", str2);

    // Copy string
    char copiedStr[100];
    copyString(copiedStr, str1);
    printf("Copied string: %s\n", copiedStr);

    // Length of string
    printf("Length of first string: %d\n", stringLength(str1));
    printf("Length of second string: %d\n", stringLength(str2));

    // Concatenate string
    concatString(result, str1);
    concatString(result, str2);
    printf("Concatenated string: %s\n", result);

    // Reverse string
    reverseString(str1);
    reverseString(str2);
    printf("Reversed first string: %s\n", str1);
    printf("Reversed second string: %s\n", str2);

    // String comparison
    int cmp = compareString(str1, str2);
    if (cmp == 0) {
       printf("The strings are equal.\n");
    } else if (cmp < 0) {
       printf("The first string is less than the second string.\n");
    } else {
       printf("The first string is greater than the second string.\n");
    }

    return 0;
}
```