

CS220 - Computer System II
Assignment 3 (100 points)

Due: 09/23/2016, 11:59pm

1 Instructions

- Answer the questions individually. Group effort is not allowed.
- Reading: <http://c-faq.com>, K&R C, chapter 1, 2.

2 Questions

1. Write a function:

```
1 unsigned int my_strncpy(char *src, char *dst, unsigned int num_bytes);
```

This function copies no more than `num_bytes` characters from `src` to `dst`. `dst` is an uninitialized array which is guaranteed to be at least `num_bytes + 1` bytes. It returns the number of bytes copied. (50 points)

2. Write 2 versions of swap functions:

a `void swap_temp(int *num1, int *num2);` that swaps integers pointed to by `num1` and `num2`. You are allowed to use a temporary variable. *num1* \neq *num2*. *num1, num2* can be any two valid integers. (25 points)

b `void swap_notemp(int *num1, int *num2)` that swaps integers pointed to by `num1` and `num2`. You are not allowed to use a temporary variable. *num1* \neq *num2*. *num1, num2* can be any two valid integers. (25 points)

3 Submitting the result

Submit your program on hackerrank and upload the source code to Blackboard.