

## CS 12 Assignment 3

### Due Wednesday, May 7

This assignment will deal with strings. You should use the string functions in *string.h* when possible. You will not receive full credit unless you use these functions.

1. Write a function that reads a string of words separated from each other by any number of spaces or tabs, and processes the string such that it contains only one blank separating each word. Your function should store the final string in the original string, and should print its contents on the screen.

Given: `‘‘I had a sandwich for lunch.’’`

Output: `‘‘I had a sandwich for lunch.’’`

2. Write a function with two string parameters, *text* and *word*. This function should find all occurrences of *word* in *text*, replace each character of the occurrences by the character `*`, and prints and returns the *text*.

Given: `‘‘On Tuesday I went to the mall. I had fun on Tuesday’’`  
`‘‘Tuesday’’`

Output: `‘‘On ***** I went to the mall. I had fun on *****’’`

3. Write a function that reads in a string, and inserts another string into it immediately after a specified substring. For example, given the string *‘‘This is a structured program.’’*, the specified substring *‘‘structured’’*, and the inserting substring *‘‘and modular’’*, your function should output and return the string *‘‘This is a structured and modular program.’’*
4. Write a main program that shows how each of these functions work.

You must use Unix for this assignment.