

CSC301 Assignment #4

Write functions for the following specifications.

For each problem, paste in your SML function definition (text that can be copied and pasted to try out your code) and a screen shot of your program running with some example data. Submit a PDF of this document.

Handwritten programs are not accepted!

Problem

Write a function *max3* of type *int*int*int -> int* that returns the largest of three integers.

Problem

Write a function *second* of type *'a list -> 'a* that returns the second element of a list. Your function need not behave well on lists with less than two elements.

Problem

Write a function *permute* of type *'a list -> 'a list* whose output list is the same as the input list, but with the first two elements of the list swapped.

For example: *permute ([1,2,3,4])* should return *[2,1,3,4]* or *permute(["a","b","c"])* should return *["b","a","c"]*

Your function should work with lists of any length.