

## CS4110: Computer System Design Lab

### Assignment #1

**Assignment Evaluation Date: 17<sup>th</sup> Aug, 2015**

1. Ackermann's function  $A(m, n)$  is defined for  $m \geq 0$  and  $n \geq 0$  as
  - a.  $A(0, n) = n + 1$ , for  $n \geq 0$
  - b.  $A(m, 0) = A(m - 1, 1)$ , for  $m \geq 1$
  - c.  $A(m, n) = A(m - 1, A(m, n-1))$ , for  $m \geq 1, n \geq 1$

Write a recursive procedure (in assembly language) to compute this function. Your main program should handle the user interface to request ***m*** and ***n*** and display the final result.

2. Write an assembly code to copy the contents of a file to another file using File system calls.