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COE 301/ICS 233, Term 172

Computer Architecture & Assembly Language

Quiz# 4

Date: Sunday, March 11, 2018

- Q.1.** Implement the following two procedures using MIPS assembly language. Use MIPS programming convention in saving registers.
- (a) A procedure, RSum, that computes the sum of a given row. Assume that the procedure receives as parameters the address of the array in register \$a0, the number of columns in register \$a1, and the index of the row to be summed in register \$a2. The procedure should return the sum of the row in register \$v0.
 - (b) A procedure, ArrayRowSum, that displays the sums of all rows in the array based on using RSum procedure. Assume that the procedure receives as parameters the address of the array in register \$a0, the number of rows in register \$a1, and the number of columns in register \$a2. Each row sum should be printed in a new line. To print an integer in register \$a0, use syscall with \$v0=1. To print a character in \$a0, use syscall with \$v0=11.

