MIPS Programming – Homework
Due Date: Tuesday, Nov. 27

This homework must be done **INDIVIDUALLY**. Before starting working on the homework read again the academic integrity policy. No YouTube videos or other sources.

Use ONLY instructions listed in the Integer Instruction Set

(especially when it comes to branches – use only beq, bne or comparisons to zero, no blt, bgt, subi, no multi…) You can use li and move.

Note: for all programs that you will write be sure that you give a **detailed documentation.** Each program should be commented (documented) with the following information:

1. Your name
   Last modified date:
   Program name

2. Description (what the program does)
   C (or java) -pseudo-code

3. Registers Use (name of registers and what they will store)

Program1 (65 points)

Write a MIPS assembly language program that will cover the following steps:

Prompts the user to enter a first integer in the range [-30, -10]
Prompts the user to enter a second integer > 5
Compute (int1+ 32*int2 – 28) // don't use *subi; don't use mul, muli*
Print the value of the result together with a result message
Repeat

The program should enforce the rule that the two entered integers must be in the mentioned intervals. **If the entered integer is not in the specified range, the program prompts again the user to enter an integer in the specified range.**

Create a **sentinel** (sentinel value **999**) that will allow the user to exit the program.

Name your program: **yourlastname_h1.s**

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Program 2 (35 points)

Write a MIPS assembly language program that accomplishes the following tasks:

The program will prompt the user to enter 10 values that will represent the elements of an array.
Compute and display the sum and minimum of these elements.
Display the elements of the array on one column, in reverse order.

Name your program: **yourlastname_h2.s**

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No cheating and/or plagiarism are allowed.