Lab One – Part A

There will be questions in both the MidTerm and Major exams from this Chapter. Hence, this assignment has to be done *individually*.

Do not to use a compiler [www.godbolt.org] to generate the assembly [in the first instance] as you will not have access to the same in the closed book/notes/no internet Midterm and Majors exams. You can use compiler to give you hints after you have exhausted your thinking quota.

Write RISC-V assembly code for the following:

1. Print Your name and Entry number.
2. Store 10 values in an array by getting input from the user. Sum the values. Print the sum.
3. Read a 10 character alphanumeric string X. Print a string that contains one letter from your name followed by 1 letter/number from X.
4. Write a program to add large numbers. Assume that your numbers don't fit in 64 bits. Specifically for this problem, write a program that can add numbers upto 26 [4 x 64] bits.
5. Write a program that takes an integer as input and outputs Fib(n) where Fib(n) is the nth Fibonacci Number.

What you need to submit :

A single tar/zip file containing a Directory containing the following:

- 5 Sub directories : one for each problem
- Each sub directory to contain
  a. Source code .s or .asm file
  b. The screen shot of the RARS window with the edit tab in focus along with the Registers and the output in Third Pane.
  c. Some Visible Identifier in the screenshot which shows identifies You with the screenshot -☺

Please follow this discipline as we will try to auto grade the assignments.