Computer Architecture - CS2323. Autumn 2025
Lab-1 (Basic assembly programming)

Write an assembly program using RISC-V instructions to multiply two SIGNED integer numbers present in registers x7 and x8, and store the product in register x9. Assume that the result will NOT overflow the register width. MUL instruction cannot be used.

Extend your program such that, rather than operands being already present in x7 or x8, it loads two values from memory locations 0x10000000 and 0x10000008 into x7 and x8 respectively, and stores the result from x9 in 0x10000050.

Submission instructions:
1. Submit the assembly code as a file named YOUR_ROLLNUM.s (e.g., CSYYBTECHXXXXX.s)
2. The assignment should be done individually
3. Copying from others or any other source is strictly prohibited and subject to strict penalty. Generating code from ChatGPT is also NOT allowed. Please read https://cse.iith.ac.in/academics/plagiarism-policy.html for the department's policy against any form of copying.
4. Assignments will be tested for similarity among each other and any violation will be handled appropriately.