SF Lab-1

Question 1. Considering the RISC-V instruction set, write assembly-level codes for the following operations using the following website: https://godbolt.org/
1. Generating a Fibonacci Series
2. Finding the factorial of a number
3. Finding the sum of squares of odd numbers in a given range

Question 2. Convert the above assembly codes to binary code.
Reference/Source: RISC-V Reference Manual

Question 3. Develop a single-cycle computer to execute the above programs with R, I, B, J, and S-type instructions per your requirements.

Question 4: Convert your single-cycle computer into a Pipeline Computer

Question 5: Convert your Pipeline Computer into Superscalar Computer