Which of the following functions is used to open a file in C?

fopen()

What is the correct way to check for errors after opening a file in C?
if (fp == NULL)

In RISC-V assembly, which instruction is used to add the contents of two registers?
add

What does the RISC-V sub instruction do?

Subtracts the contents of one register from another.

Which of the following RISC-V instructions can be used to subtract an immediate value from a register?

addi

Which RISC-V instruction performs a logical right shift on the contents of register x7 by 4?

srli x8, x7, 4

slli x2, x3, 4

Shifts the value in x3 to the left by 4 and stores it in x2.

In the instruction add x1, x2, x3, what happens to the contents of x1 after execution?

x1 is set to the value of x2 + x3.

sub x10, x11, x12

It subtracts the value in x12 from x11 and stores the result in x10.

If the instruction addi x4, x3, -5 is executed, what happens to register x4?

x4 is set to x3 - 5.

In RISC-V, which instruction is used to load a 32-bit word from memory into a register?

lw

Which of the following RISC-V instructions stores the contents of a register into memory?

sw

How is the immediate value used in the lw instruction in RISC-V?

It is added to the base register to form the memory address.

sw x3, 0(x4)

it stores the contents of x3 into the memory address at 0+x4.

Which instruction is used to load a word from memory into register x10 with an offset of 4 from the base address in register x11?

lw x10, 4(x11)

lw x5, 4(x6)

It loads a 32-bit word from memory at address x6 + 4 into x5.

Which RISC-V instruction is used to store the contents of register x2 to memory at an address calculated by adding an offset of 8 to the base address of x3?

sw x2, 8(x3)

If the instruction lw x5, 0(x6) is executed and the value at that memory location x6 + 0 is 0x12345678, what will the contents of register x5 be after execution?

0x12345678

Consider the following RISC-V code, where arr[] is an array of 32-bit integers, and x6 holds the base address of arr[]. What does the instruction sw x7, 8(x6) do?

It stores the value in x7 back into arr[2]

Suppose you have an array arr[] of integers, and the base address of arr[] is stored in register x6. What is the correct instruction to load the 10th element (arr[9]) of arr[] into register x7?

lw x7, 36(x6)

Which of the following instructions will store the value in register x9 into the 8th element (arr[7]) of the int array arr[], assuming the base address of arr[] is stored in x6?

sw x9, 28(x6)