

# RISC-V Assembly Programming - Functions

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## 1 Lab Assignment 2 (Graded)

1. Write a RISC-V assembly program that defines the function:

```
int matmul(int *A, int *B, int *C);
```

Here  $A$ ,  $B$  and  $C$  are  $3 \times 3$  matrices, and  $C = A \times B$ . The function returns 0 if at least one of the element is 0, and 1 otherwise. Write the program in a file named `asms/5-matmul.s`. You can start with the template code given previously, but make sure that `matmul()` is a separate function that is called from `main()` (and adheres to the RISC-V calling conventions).

2. Write a recursive code to compute the factorial of a number. Write the program in a file named `asms/6-fact.s`. You can start with the template code given previously, but make sure that `fact()` is a separate function that is called from `main()` (and adheres to the RISC-V calling conventions).