



# EXERCISES — Integer Matrices Multiplication

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version #7be580532266ed398481e31366afcc24b1950c2a



**The way is lit. The path is clear.  
We require only the strength to follow it.**

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## Contents

1 Goal

3

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## File Tree

```
int_mats_mult/  
├── int_mats_mult.c  (to submit)  
└── int_mats_mult.h  (to submit)
```

**Authorized headers :** You are only allowed to use the functions defined in the following headers

- err.h
- errno.h
- assert.h
- stddef.h

**Compilation :** Your code must compile with the following flags

- -std=c99 -pedantic -Werror -Wall -Wextra -Wvla

**Main function :** None

## 1 Goal

You have to implement the `mat_mult` function that compute the multiplication of two matrices. Its prototype is:

```
void mat_mult(int **mat1, int **mat2, size_t *matrices_size, int **out);
```

The `mat1` and `mat2` values are accessed according to the following format: `mat[line][column]`.

The `matrices_size` argument contains the size of both matrix, and respects the following format {`a`, `b`, `c`} where `mat1` is of size (`a`, `b`) and `mat2` of size (`b`, `c`). As you may suspect, this means that only compatible matrices will be given to this function.

The result has to be stored in the `out` parameter, which has been previously allocated.

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