# Exercises — My atoi

version **#7be580532266ed398481e31366afcc24b1950c2a**


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## Contents



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**File Tree**

```
my_atoi/
├── my_atoi.c  (to submit)
└── my_atoi.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 must implement the following `my_atoi` function :

```
int my_atoi(const char *str);
```

This function converts the string argument into an int. The argument can be composed as follows (in this order):

- A (possibly empty) sequence of whitespace characters that will be discarded.
- An optional plus or minus sign.
- A nonempty sequence of digits.

In any other cases `my_atoi` must return 0.

Here are some precisions:

- If a digit is followed by a non-digit character, then you must return 0.
- Whitespaces are only allowed before the sign, if there is any whitespace between the sign and the digits, then you must return 0.
- There can only be one sign, if there are two or more signs, return 0.

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