



EXERCISES — My itoa_base

version #7be580532266ed398481e31366afcc24b1950c2a



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

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File Tree

```
my_itoa_base/  
├── my_itoa_base.c  (to submit)  
└── my_itoa_base.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 following function:

```
char *my_itoa_base(int n, char *s, const char *base);
```

This function should convert the integer `n` in its representation in base `base` and store this representation in `s` (without forgetting to end it by `'\0'`). The function returns the resulting string (the same as the one given by the argument `s`). Consider that the caller already allocated the space needed in `s`.

You need to handle negative numbers only in base 10.

The argument `base` is interpreted as follows: the `i`-th character of the string is the representation of the value `i` in the target base.

Base 1 is the only base you can leave behind. All other bases must be handled.

2 Examples

```
my_itoa_base(42, s, "0123456789ABCDEF");
```

`s` will be equal to "2A".

```
my_itoa_base(32, s, "0123456789abcdef");
```

`s` will be equal to "20".

```
my_itoa_base(12, s, "01");
```

s will be equal "1100".

```
my_itoa_base(80, s, "0123456");
```

s will be equal "143".

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