



EXERCISES — The ASCII carousel

version #



IT IS MY JOB TO MAKE SURE YOU DO YOURS.

Copyright

This document is for internal use at EPITA ([website](#)) only.

Copyright © 2021-2022 Assistants [<assistants@tickets.assistants.epita.fr>](mailto:assistants@tickets.assistants.epita.fr)

The use of this document must abide by the following rules:

- ▷ You downloaded it from the assistants' intranet.*
- ▷ This document is strictly personal and must **not** be passed onto someone else.
- ▷ Non-compliance with these rules can lead to severe sanctions.

Contents

1	The ASCII carousel	3
1.1	Goal	3
1.2	Example	3

*<https://intra.assistants.epita.fr>

1 The ASCII carousel

Files to submit:

- `ascii_carousel/rot_x.c`

Main function: None

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

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

1.1 Goal

Write a function that performs a Caesar shift of `X` ("`rotX`") on a string. Only the alphabetical characters (belonging to the class of characters `[A-Za-z]`) must undergo the shift. The expected function prototype is:

```
void rot_x(char *s, int x);
```

Your `rot_x` function must allow both positive and negative numbers.

Tips

If `s` is null, your function should do nothing.

1.2 Example

This example uses the following `main.c`:

```
#include <stdio.h>

#include "rot_x.h"

int main()
{
    char in[] = "Shhh ShE is ZZZzZ059%";

    printf("In: %s\n", in);
    rot_x(in, 13);
    printf("Out: %s\n", in);

    return 0;
}
```

```
42sh$ gcc -std=c99 -Wall -Wextra -Werror -pedantic -o test main.c rot_x.c
42sh$ ./test
In: Shhh ShE is ZZZzZ059%
Out: Fuuu FuR vf MMMmM059%
```

It is my job to make sure you do yours.