Exercises — The ASCII carousel

version #

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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.