



# EXERCISES — Bit Rotation

---

version #7be580532266ed398481e31366afcc24b1950c2a



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

# Copyright

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

Copyright © 2022-2023 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 Goal

3

---

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

## File Tree

```
bit_rotation/  
└─ rol.c  (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

Rotate the bits of `value` by `roll` rolls to the left. Each roll will shift the bits by one bit in the left direction. The leftmost bits are placed on the right.

```
[1]1101010 -> 1101010[1]
```

The prototype:

```
unsigned char rol(unsigned char value, unsigned char roll);
```

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