



# EXERCISES — Test a bit

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version #



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# 1 Test a bit

**Files to submit:**

- test\_a\_bit/is\_set.c

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

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

## 1.1 Goal

Write the `is_set` function that returns `true` if the  $n$ th bit is set, `false` otherwise.

```
unsigned int is_set(unsigned int value, unsigned char n);
```

## 1.2 Example

```
#include <stdio.h>

#include "is_set.h"

int main(void)
{
    printf("%d\n", is_set(24, 4));
    printf("%d\n", is_set(24, 3));

    return 0;
}
```

```
42sh$ gcc -Wall -Werror -std=c99 -Wextra -pedantic test.c is_set.c -o is_set_example
42sh$ ./is_set_example
1
0
```

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