Exercises — vmax_ptr

version #

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1 vmax_ptr

Files to submit:

- vmax_ptr/vmax_ptr.c

Provided files:

- vmax_ptr/vmax_ptr.h

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

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

1.1 Goal

Write a function that takes an array of `int` and its size and returns the second maximum value that it contains. You can assume that the array will always contains at least two elements, that its size will always be correct and that all elements will have a different values.

```c
int vmax(const int *ptr, size_t size);
```

1.2 Example

```c
#include <stdio.h>

#include "vmax_ptr.h"

#define array_len(arr) (sizeof(arr) / sizeof(*arr))
#define btoa(x) ((x) ? "true" : "false")

int main(void)
{
    const int arr[] = { 2, 5, 3, 1, 6, 4 };
    const int res = vmax(arr, array_len(arr));
    printf("%s\n", btoa(res == 5));
    return 0;
}
```

```
42sh$ ./vmax_ptr | cat -e
true$
```

It is my job to make sure you do yours.