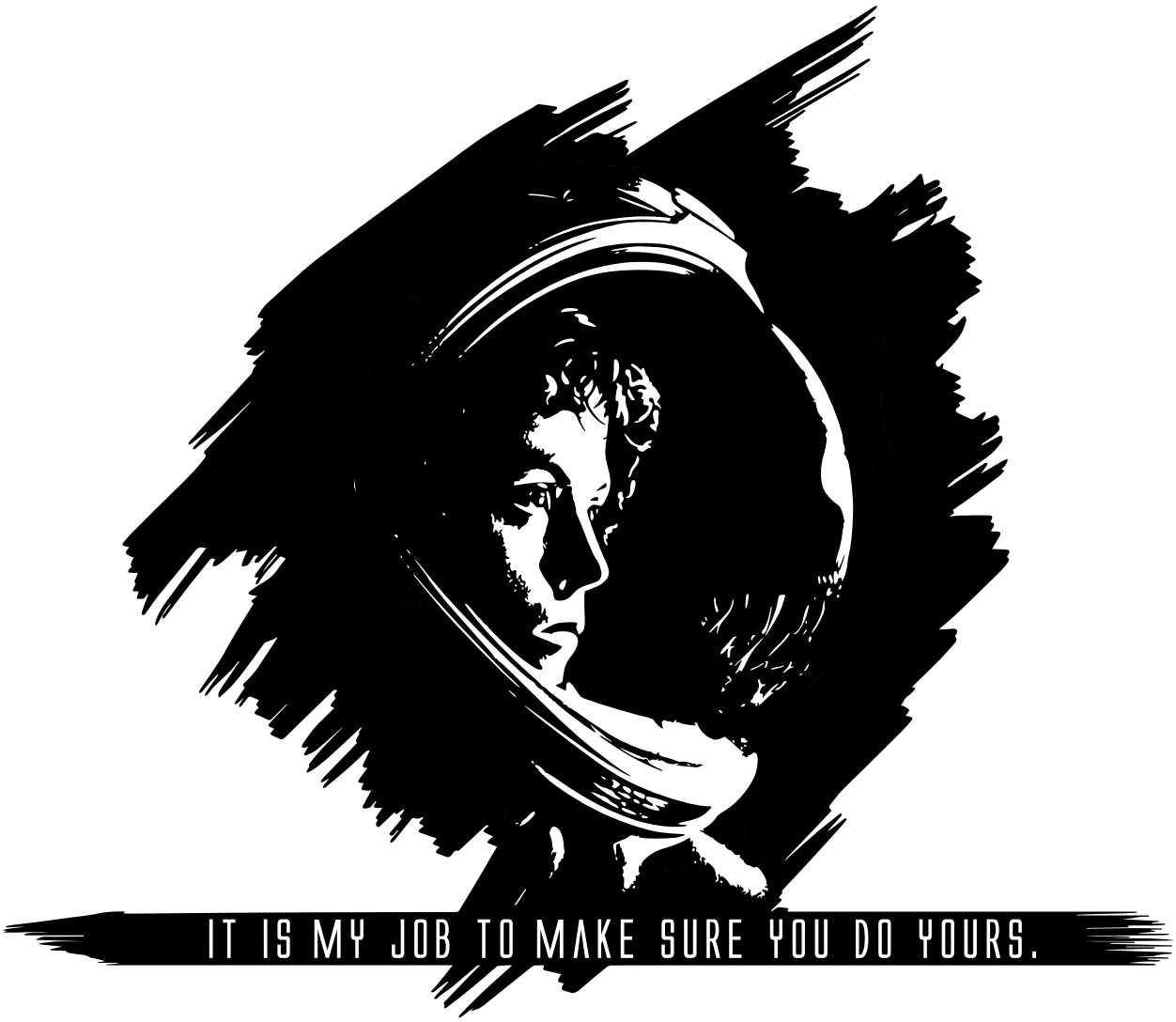
Exercises — Pine tree

version #



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Contents

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1 Pine tree

Files to submit:

- pine/pine.c

Main function: none

Authorized functions: You are only allowed to use the following functions:

- putchar(3)

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

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

1.1 Goal

Implement the function with the following prototype:

```
int pine(unsigned n)
```

It prints on the standard output a pine using * characters. `n` is the height of the pine and is always at least 3. The trunk of the tree is $(n/2)$ lines high but always on one column. The tree must be followed by a line feed. `pine` must return 1 if `n` is strictly below 3, or 0 otherwise.

1.2 Examples

In the following examples,

- > represents the beginning of a line
- $ represents the end of a line

These two symbols must **not** be printed.

`pine(5)` prints:

```
>    *$
>   ***$
>  *****$
> *******$
>*********$
>    *$
>    *$
```

`pine(4)` prints:

```
>   *$
>  ***$
> *****$
>*******$
>   *$
>   *$
```

`pine(3)` prints:

```
>  *$
> ***$
>*****$
>  *$
```

It is my job to make sure you do yours.