



2048

The game

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Summary: This document contains instructions for the rush in 2048.

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Chapter I

Preamble

This rush will be easier if you're viewing this in advance [instructional video](#)

Man: It takes a lot to make a stew Woman: A pinch of salt and
laughter, too M: A scoop of kids to add the spice

W: A dash of love to make it nice, and you've got Both: Too many Cooks W:
Too many Cooks B: Too many Cooks M: Too many Cooks B: Too many
Cooks W: Too many Cooks B: Too many Cooks M: Too many

W: It takes a lot to make a stew M: When it comes to me
and you W: And _him_ and her and the baby, too B: Too
many cooks, it's true

M: The Saying goes, it'll spoil the broth W: Honey, I think that's
not true

M: Well, maybe too many cooks will spoil the broth,
goal they'll fill our hearts with B: So much, so much
lo-o-ove

Too many Cooks

M: A family is like a soup W: Everyone adds an extra
scoop M: Mix an ounce of smile so sweet

W: A dash of cool to add the heat, and you've got B: Too many Cooks W: Too
many Cooks B: Too many Cooks M: Too many Cooks B: Too many Cooks M:
Too many Cooks B: Too many Cooks W: Too many cooks

B: Too many Cooks W:
Too many Cooks B: Too
many Cooks M: Too many
Cooks B: Too many Cooks
W: Too many Cooks B:
Too many Cooks M: Too
many Cooks B: Too many
Cooks W: Too many
Cooks B: Too many Cooks
M: Too many Cooks B:
Too many Cooks W: Too
many Cooks B: Too many
Cooks M: Too many

It takes a lot to make a stew W: Especially When It's me
and you M: And _him_ and Steve from corporate, too

. . .

Chapter II

Subject

The purpose of this is to recode rush Thurs 2048 C for a ffi drying console. It's not very complicated, and yet many of you will fail by abuse of trust and lack of verifications ... if so, even preventing you! And to be honest, 2048 is more complex than we imagine.

You will need to be rigorous, careful not to forget anything, read this specification, thoroughly test your program, and successfully work for both. So do not waste time! Especially that there is room to make bonus easily if your program is well designed from the outset.

2048 is played was simply gray 4 x 4 grid, with numbered tiles That slide smoothly When a player moves em using the arrow keys oven. Every turn, a new tile will randomly APPEAR in an empty spot on the board with a value of 2 or 4. Either Tiles slide as far as possible, in the direction of up to Chosen They Are stopped by Either Reviews another tile or the edge of the grid. If two tiles of the Saami number collide while moving, They Will merge into a tile with the total value of the two tiles That collided. The resulting and tile can not merge with Reviews another tile again in the Sami move. (source: Wikipedia)

As your game was ffi chera console, it will not "smoothly" but "Instantly". You can try here in 2048: [click](#)

So you need:

- ffi was expensive coffee 16 boxes console (with the characters of your choice);
- in these cases, numbers (two boxes filled in the initial state);
- manage movements up, down, left, right and in the game;
- manage the appearance of new random numbers ('2' and '4');
- indicate to the player when he won or lost;
- let the player continue his game after reaching the victory condition;
- ah, you said I chews you work too good ... you understand, it's a 2048.



EXCEPTIONALLY, you are allowed to play in 2048 as part of that rush. Any other use of video game cluster remains subject to rules ...

Technical considerations:

- The game ends when the player can not move or when a case reaches the value 2048. This value will be an enum in a header and may be modified in defense (including verifying what happens when the victory condition is reached, because with 2048 it may be long).

- So you need to make at least a file containing *.h for example:

```
enum      e_const
{WIN_VALUE = 2048};
```

- You will ensure that this value is taken into account if it is a power of 2.
- ESC should allow to leave the game properly.
- You are entitled to your libft, functions rand (3), srand (3), time (3), signal (3), and all functions of the ncurses lib. You can use other functions if necessary for your bonus.
- Banning the use of global variables, except those that might already be defined for you. We tolerate an exception to this rule to manage signals.
- You will not use static variable.
- The size of the plate should fit the size of the window when you launch the program, and dynamically when you resize the terminal (see video).

Chapter III

Bonus

Bonuses will be evaluated only if the compulsory part is perfect. If you make a personal bonus that comes into conflict with the specifications (eg do popper of '8' random), it must be switched off. Here are some ideas:

- colours ;
- the player can choose to play on a 4x4 or 5x5 grid;
- the launch of the game is preceded by a menu (simple text lines numbered rotées su ffi feels), offer at least two choices of which to start the game;
- the cipher res are drawn ascii art rather than cipher res ...;
- high scores are recorded with a nickname in a file scores.txt, created in the current folder if it does not exist, then ffi kets in the game. These bonuses are already somewhat advanced and there are certainly more obvious things to do before. Moreover, a number of obvious and relatively simple bonus allow you to earn points if you find them.

Chapter IV

Guidelines

- You are free to organize and name your files as you wish.
- The executable must be named `game_2048`.
- You must make a file Make the.
- Make Your order must compile the project, and must contain the usual rules. It must recompile the program only when necessary.
- Make your file should compile with the flags `-Wall`, and `-Wextra -Werror`.
- If you are smart and use your `libft`, you must copy the sources and the associated file Make a folder named `libft` which should be at the root of your deposit returned. Make Your order will compile the library by calling its Make the file before compiling your project.
- Your project should be the standard.
- In any case your program should exit unexpectedly (segmentation fault, bus error, double-free, etc.).
- Any function in addition to the first in a file `.c` must be defined static.
- Any memory allocated on the heap must be freed properly.
- You should never make code you did not write yourself. If in doubt, you will be invited to a session recode the jar to judge your good faith.
- You must get to the root of your rendering deposit a file named `author` containing logins followed the two members of a group '\ n', such that:

```
superprompt> cat -e ./auteur login1 $ login2 $  
superprompt>
```


Chapter V

Rating

- If you are missing one of the main features of the game you may not validate the rush.
- Both members of the pair will be able to explain a point of detail of the code or the operation of the program as a whole. Proofreaders are encouraged to ask questions to each of the two crewmen.
- To put a little pressure, we remind you that the correction will strictly enforce these rules:
 - File invalid author: 0;
 - Make fi incomplete or relink: 0;
 - Standard of fault on any part of the rendering code: 0;
 - Segfault, even if caused by the addition of a bonus: 0;
 - Luggage chapter unfulfilled Notes: 0.
- In return, the correction will be more conciliatory on certain points:
 - if your program is struggling to handle too many requests as a result;
 - if your program does not handle when holding a button down;
 - if your program is launched in a "vacuum environment";
 - if your game is bad (as long as walking);
 - if your game is ugly (the moment you see the boxes and cipher res). Good luck to all for the

rush!