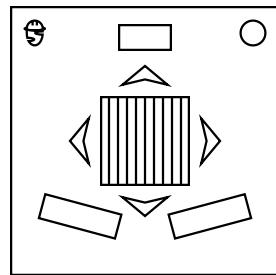


## On the Subject of Prison Break

*Beware the iconic directional laughs...they belong to a dangerous war criminal.*

Hello, ████. This is your first day being employed as a prison security guard officer, and although there are other manuals that you should refer to, the higher-ups always recommend this one first. Let me tell you why.



As mentioned above, you should know - this manual is used when prisoners attempt to escape. Well, one of the prisoners here gets a little... too frequent at escaping, and no matter how high the level of security is, she seems to always vanish in an instant.

This is why you should check her jail cell at all times, if possible, by selecting the module. If she isn't there, sound the alarms immediately. (Well even if you didn't other would by default)

As this happens very frequently, we have a manual specifically just for stop her from escaping, and you should probably know which it is at this point.

### A guide to catch Prisoner 1201-111

Prisoner 1201-111, a war criminal charged with arson, genocide, murder, terrorism, inhumane experiment, felony escape and a lot more crime activities, is sentenced to imprisonment for eternity.

She is a veteran escapist in maximum security prisons, but we always have a few tricks up our sleeves. Still, please be aware that you only have 5 minutes to secure her. (Time starts as soon as you select the module, be careful!)

One thing to notice when she eventually tries to escape again are her laughs - her comically directional laughs that unconsciously tell us a clue about her escape path.

The sound receiver device you have, by default, will receive and analyze the laughs, while showing them in the form of directional arrows.

Although there are multiple other complicated steps that locate other escape paths, since you just joined here, you are only given the task to secure one of them.

## Decrypting directional laughs

- Each analyzed laugh denotes a direction, either a cardinal direction (**North, East, West, South**) or an ordinal direction (**Northwest, Northeast, Southwest, Southeast**). This sequence of directions will be shown in the screen, with a longer pause before repeating.
- When decrypted, this sequence will form a path, seemingly starting from her prison cell to a certain place in the prison. Go to this place (by pressing the arrow buttons) and secure it (by pressing the display).
- Her path usually composes of eight to twelve cardinal directions. Ordinal directions are to be treated as a **combination of two closest cardinal directions**. For example, southwest denotes that she moves south then west, or west then south, depending on the path.
- Note that you should **never** remove leading zeroes unless stated otherwise.
- Firstly, we will modify the serial number. Concatenate each character in the serial number to form a number, with all letters converted to their alphabetic positions (A = 1, B = 2, etc.)
- Go through each digit from left to right, starting from the second digit. If the digit directly to the left of this one is even, add 5 to this digit, modulo 10. (For example, 12345 would be changed to 12895)
- Now, from now on:
  - If the number of received directions don't share parity with the current number of digits, take the sum of the first and last digits of the number, modulo 10, and insert it in the middle of the number if it's even, otherwise insert it in directly to the left of the middle digit. Two numbers share parity if they are both even or both odd.
  - If the number of received directions is larger than the current number of digits, duplicate the entire number, add 1 to each digit, modulo 10, then append it at the end of this number string.
  - If any of the conditions above aren't satisfied, go back to the first instruction again and repeat the process.
- This number is now the final number. Take the middle n digits from this number, where n is the number of received directions.
- Pair each direction to each digit, from left to right. For each pair:
  - If the digit is 5, always keep the current direction.
  - Otherwise, if the digit is prime, reflect the current direction. (North becomes south, etc.)
  - Otherwise:
    - Identify all other unmodified directions in each pair. (**The digit 5 rule does not count!**)
    - If the number of activations (the number of times the prisoner has attempted to escaped so far) in this module is even, your initial rotational direction is clockwise. Otherwise it's counterclockwise.
    - Starting from the first unmodified pair, assign a rotation direction to each pair, alternating between the initial direction and the other while advancing.
    - For each pair, if the digit is a perfect square larger than zero, rotate the current direction by 45 degrees, otherwise rotate it by 90 degrees. Rotate them based on the rotational direction assigned.
- You should now have the final taken path.

The two smaller displays below the jail cell show coordinates. The left shows Prisoner 1201-111's jail cell number, while the right shows your current location (Letter denotes column, number denotes row, top left is A1). An extra copy of the layout of the prison is also printed in the next page, for your convenience.

When you have finally secured the place correctly, the prisoner will have nowhere to run and would be forced to comply to our orders and back to solitary confinement, and the module will also be disarmed. Otherwise, **wrongly securing the place or letting the five-minute timer run out** would give the prisoner a chance to successfully escape prison, and **a big strike will occur**. Luckily enough our forces are strong enough to quickly recapture her back (**which could take about 30 seconds**) into her cell, and once she's back you can continue your regular check-ups.

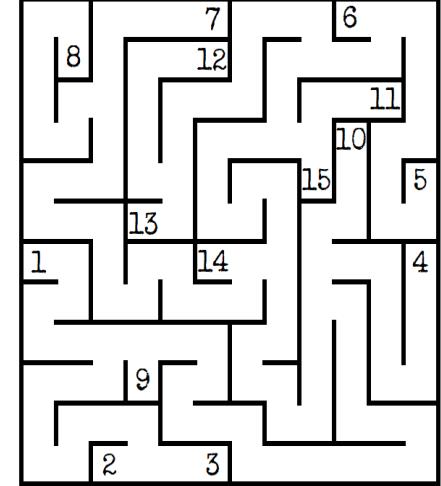
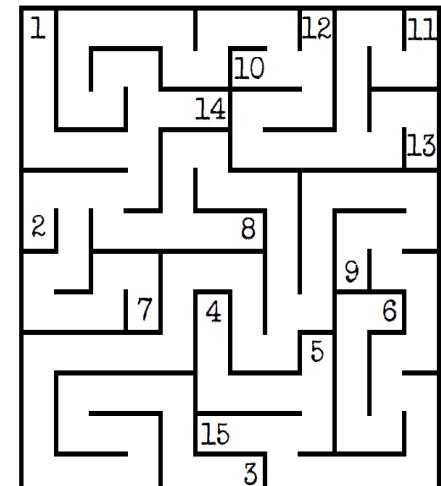
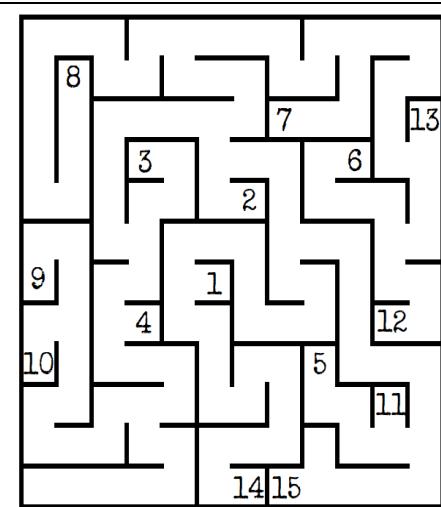
Walking into a wall won't occur a strike, but you would need some time (**at least 2 seconds**) to regain your senses, so any movement is ceased during this time period. After that you can move normally again.

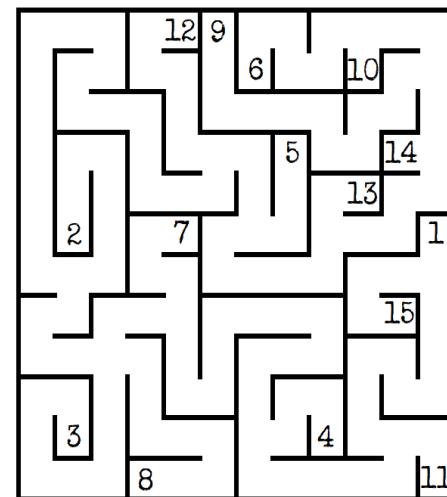
I hereby hope you'll carry out your duty to the fullest. Thank you, and good luck.

- The Prison Director

## Appendix: Layouts of various prisons

*Oh and if you're wondering why are the layouts shaped like a maze, apparently this is one of the precautions to confuse escapists, but then ironically it confuses most of us guards too...*

Background texture	Prison Name	Prison Layout
	Oozora Prison Department	 <pre> graph TD     1((1)) --- 2((2))     1 --- 3((3))     2 --- 4((4))     2 --- 5((5))     3 --- 6((6))     3 --- 7((7))     4 --- 8((8))     4 --- 9((9))     5 --- 10((10))     5 --- 11((11))     6 --- 12((12))     6 --- 13((13))     7 --- 14((14))     7 --- 15((15))     8 --- 12     9 --- 14     10 --- 15     11 --- 15     12 --- 13     13 --- 14     14 --- 15     15 --- 4   </pre>
	Green Dolphin Street Prison	 <pre> graph TD     1((1)) --- 2((2))     1 --- 3((3))     2 --- 4((4))     2 --- 5((5))     3 --- 6((6))     3 --- 7((7))     4 --- 8((8))     4 --- 9((9))     5 --- 10((10))     5 --- 11((11))     6 --- 12((12))     6 --- 13((13))     7 --- 14((14))     7 --- 15((15))     8 --- 10     9 --- 14     10 --- 12     11 --- 13     12 --- 13     13 --- 14     14 --- 15     15 --- 3   </pre>
	Center Perks 2.0	 <pre> graph TD     1((1)) --- 2((2))     1 --- 3((3))     2 --- 4((4))     2 --- 5((5))     3 --- 6((6))     3 --- 7((7))     4 --- 8((8))     4 --- 9((9))     5 --- 10((10))     5 --- 11((11))     6 --- 12((12))     6 --- 13((13))     7 --- 14((14))     7 --- 15((15))     8 --- 10     9 --- 11     10 --- 12     11 --- 13     12 --- 13     13 --- 14     14 --- 15     15 --- 2   </pre>

Rattlesnake  
Springs

Fort Tundra

