

D.E.S.P.A.I.R.

Diogn's Eldritch Stories in Preparation for Annoying, Insightful Regrets

A Mock HOPE Template made with Love by Diogn Mortera (@mortrpestl)

What's the Point?

Mock HOPE lol /j I

I made these questions not primarily for you to code them but for you to exercise your insights and thought-making process.

Solutions and (most of the time) code for non-heartbreaks can be found in the end of the document and the folder where you probably found this document, respectively. If you can't solve it, read the solutions for insights 😊

On Grading Yourself

You can submit code in my *Offline Judge* 😎.

- Your code for most problems and their subtasks can be checked by going to the “(submit code here!) offline_judge” folder;
- going to the folder with the problem number/function name;
- typing your code into student_solution.py, and;
- running the file.

Verdicts will be provided as the file is run. Isn't that cool!

Do note that *there may be mistakes in the logic of my solutions/test cases I am unaware of*. Please let me know, but please do understand if ever 💔 there will be things that will slip under my proofreading 😊

- That said, I update the file and test cases regularly if I find them / someone points them out so regularly *redownload* the folder. Next MOCK Hope, maybe I have set up my own Online Judge though so that isn't a problem, but for now, please do that if you want updated versions of test cases 😊

Other Information

- *The difficulty can fluctuate.* **SKIP PROBLEMS YOU THINK YOU CAN'T SOLVE/ WILL TAKE TIME and TRY THEM IF AND ONLY IF YOU'RE SURE YOU'VE SOLVED ALL THAT YOU COMFORTABLY CAN.**
 - This should be the general strat even in the actual HOPE. Some problems may be easier or harder depending on what you're good at. I tried my best to have a variety of problem types to this set.
- **Knowing and (coding) the first 1-2 subtasks of each problem should be your goal.** If you can do that, you're pretty well-off in HOPE.
 - ▶ Some subtasks are *special forms of heartbreaks*. They will be signified with a *reaction image* related to the question. When you see this, the heartbreak is *definitely not easy* to solve and probably not necessary for the HOPE either (but you never know). They will also usually not have model solutions because nobody is reading all of that.
- And of course, Don't stress yourself out.

Before you proceed: <https://oj.dcs.upd.edu.ph/cs11cheatsheet/>

Recall

(if you don't know/recall a term, try to learn it! or skip it...)

You May Include a Summary of Tricks/Important Things to Remember Here

- Like this...
- Or like this!!

Maybe even have multiple sections?

- More!

The **DESPAIR** questions can be found in the next pages.

Feel free to time yourself for *3 hours*.

[total with heartbreaks] is perfect. Try to get at least [total without heartbreaks] in 3 hours if you want to pass.

If you want to test, I recommend checking your solution against the examples for now, then checking it with the model solutions later (to avoid wasting time).

Good luck!

Problems

(1) Sample Problem Here(1)

To change this image, go to the “img” parameter of the problem container and change the filename. You may also change the width.



Use your freedom of expression here.

A problem should be as concise as possible, while still providing succinct and adequate explanation to the answerer.

What is the meaning of life? Given a and b , the meaning is $a+b$.

Task Details

Define `solve(a,b)`. You are free to add other parameters inside `solve()`, but it cannot have no parameters (as of October 2025).

Avoid changing the function name, or you will have to change more files in `tester_packet`. More on checking in the `tester_packet` README

The output should be a single int.

Examples

`solve(1,2)` results in 3

Constraints

If there are parameters, be absolutely clear in specifying them. Make sure your constraints match your test cases, especially if you have many subtasks.

Example:

$0 \leq a, b \leq 20$

- ❤️ 200 points: Insert easy subtask
- 👑 169 points: No further constraints
- 💔 0 points: Insert buff here

(2)Empty Problem for Template(2)

Task Details

Examples

Constraints