

(<https://profile.intra.42.fr>)


Remember that the quality of the defenses, hence the quality of the of the school on the labor market depends on you. The remote defences during the Covid crisis allows more flexibility so you can progress into your curriculum, but also brings more risks of cheat, injustice, laziness, that will harm everyone's skills development. We do count on your maturity and wisdom during these remote defenses for the bene fits of the entire community.

## SCALE FOR PROJECT RUBIK (/PROJECTS/42CURSUS-RUBIK)

You should evaluate 1 student in this team



Git repository

`git@vogsphere.msk.21-school.ru:vogsphere/intra-uuid-de1db` 

## Introduction

For the smooth running of this evaluation, please respect the following rules:

- Remain polite, kind, respectful and constructive whatever happens during this conversation. It's a matter of confidence between you and the 42 community.
- Highlight the potential problems you 've had with the work you're presented to the person or the group you're grading, and take the time to talk about and discuss those issues.
- Accept the fact that the exam subject or required functions might lead to different interpretations. Listen to your discussion partner's perspective with an open mind (are they right or wrong ?) and grade them as fairly as possible.  
42's teaching methods can make sense only if peer-evaluation is taken seriously.


## Guidelines

- You must only evaluate what you will find in the student's or group's GiT repository.
- Take the time to check that the GiT repository matches the student or group and the project.
- Double check that no malicious alias was used to mislead you and make you grade something different from the official repository content.

- If a script supposed to help evaluate the exam is supplied by either side, the other side will have to strictly check it to avoid nasty surprises.
- If the evaluating student has not yet taken this project, they will have to read the exam subject in its entirety before starting the evaluation.
- Use the flags available on this grading system to signal an empty or non- functional project, a norm flaw, cheating, etc. In that case, evaluation stops and final grade is 0 (or -42 if it's a cheating problem). However, if it's not a cheating problem, you are invited to keep talking about the work that has been done (or not done, as a matter of fact) in order to identify the issues that lead to this stalemate and avoid it next time.

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## Attachments

 [subject.pdf \(https://cdn.intra.42.fr/pdf/pdf/13358/en.subject.pdf\)](https://cdn.intra.42.fr/pdf/pdf/13358/en.subject.pdf)

## Foreword

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Preliminary instructions

First, make sure:

- There is a repo (in the repository git)
- No cheatin. Student must be able to explain the codes.
- Author file, external libraries need justifying...

If one of the conditions has not been met, evaluation stops. Use the accurate flag. You are invited to keep discussing the project, but you will not use the grading scale.

 Yes

 No

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## Mandatory part

*Problèmes simples*

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Error management

Try the program without any parameter, with too many parameters, with invalid parameters, with invalid sequences... Try to make it fault. Does the program behave as it should (displaying the use, quitting with a message, etc.)?

☐ Yes

☐ No

Simple position

Try the program with simple mixes with no more than 4-5 spins. Is the result correct? Does it appear in a reasonable period (2-3 seconds)? If the answer to one of theses questions is no, evaluation stops.

☐ Yes

☐ No

Complex position

Try the program with more complex mixes, between 5 and 20 spins. Is the result correct? Does it appear in a reasonable period (2-3 seconds)? If the answer to one of theses questions is no, evaluation stops.

☐ Yes

☐ No

Random position

Try the program with random mixes, more than 20 spins scale. Is the result correct? Does it appear in a reasonable period (2-3 seconds)? If the answer to one of theses questions is no, evaluation stops.

☐ Yes

☐ No

Performance

For the mixes superior than 30 spins, can the program solve them in an average number of spins below 150 and still below 2-3 seconds, including display? If the answer is no, give 0 for this question. Add 1 point for each slice of 20 spins earned.

Rate it from 0 (failed) through 5 (excellent)



## Distance-20

U R2 F B R B2 R U2 L B2 R U' D' R2 F R' L B2 U2 F2. This position called superflip, are parts of the positions that always require at least 20 spins to be solved ("Distance-20"). Does the program resolve this Cube in a number of spins comparable to the previous questions? Try other mixes of this type --> (<http://www.cube20.org/distance20s/>).

☐ Yes

☐ No

## Bonus

### *Bonus part*

#### Program bonus

The assessor will judge the scale of the bonus section. A real hardcore bonus deserve more than two very easy ones. For instance, among real nice bonuses that earn a super grade to the student if they are correctly implemented:

- There is a real 3D graphic interface that kills it (showing the solution step by step for instance).
- A hardcore algorithm that goes below the frontiers of what's possible (an average of less than 30 spins, in a few seconds, is very, very good.

It DOES deserve a solid grade).

- You can choose between different resolution algorithms, or automacally select the best one case-by-case.
- A program that deals with other puzzle sizes or shapes (2x2x2, 4x4x4,

Megaminx, Square-1...)

- ...

Among other easier bonuses, you will check:

- A mixing generator,
- A step subdivision of the solution that is "humanly understandable".
- ...

Rate it from 0 (failed) through 5 (excellent)



## Evaluated student bonus

Find a Rubik's Cube and prove your skills! The more impressive, the better. Clue: below 30-40 seconds, it is VERY impressive. But speed is not the only factor. Be creative! And talk about it together... :-)



Rate it from 0 (failed) through 5 (excellent)

## Ratings

Don't forget to check the flag corresponding to the defense

☐ Ok☐ Outstanding project☐ Empty work☐ Incomplete work☐ No author file☐ Invalid compilation☐ Norme☐ Cheat☐ Crash☐ Forbidden function

## Conclusion

Leave a comment on this evaluation

Finish evaluation

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