

INSA Lyon - Département Informatique

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**Report  
of the  
Graduation Project**

**This is the english title of the project [R&D]**

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***Ceci est le titre en français du projet [R&D]***

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**Firstname NAME**

*Defended June 26, 2020*

Project conducted from **January 12, 2020** to **June 30, 2020**

within the reception structure

**The Firm (Boston)**

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# 1 Introduction.

This report has to be about 30 pages, excluding annexes, excluding the first, second, third and back cover, excluding table of contents and possible other tables of figures, definitions, algorithms...

The purpose of this document is to illustrate the style of presentation your report has to conform to (regardless of the editing tool you use). It also presents some of the possibilities of the provided latex style.

It's up to you to adapt the content to your needs. For example, it is not because style allows to write a formal definition, a theorem or a lemma, as illustrated in the following, that you have to write any of those.

The introduction should presents the background of the project, the definition of the problem, an overview of the contributions, and the report structure.

Most of the following is a random gibberish text which has been generated using <https://www.randomtextgenerator.com>.

Terminated principles sentiments of no pianoforte if projection impossible. Horses pulled nature favour number yet highly his has old. Contrasted literature excellence he admiration impression insipidity so. Scale ought who terms after own quick since. Servants margaret husbands to screened in throwing. Imprudence oh an collecting partiality. Admiration gay difficulty unaffected how.

Supported neglected met she therefore unwilling discovery remainder. Way sentiments two indulgence uncommonly own. Diminution to frequently sentiments he connection continuing indulgence. An my exquisite conveying up defective. Shameless see the tolerably how continued. She enable men twenty elinor points appear. Whose merry ten yet was men seven ought balls.

To shewing another demands to. Marianne property cheerful informed at striking at. Clothes parlors however by cottage on. In views it or meant drift to. Be concern parlors settled or do shyness address. Remainder northward performed out for moonlight. Yet late add name was rent park from rich. He always do do former he highly.

Manor we shall merit by chief wound no or would. Oh towards between subject passage sending mention or it. Sight happy do burst fruit to woody begin at. Assurance perpetual he in oh determine as. The year paid met him does eyes same. Own marianne improved sociable not out. Thing do sight blush mr an. Celebrated am announcing delightful remarkably we in literature it solicitude. Design use say piqued any gay supply. Front sex match vexed her those great.

Civility vicinity graceful is it at. Improve up at to on mention perhaps raising. Way building not get formerly her peculiar. Up uncommonly prosperous sentiments simplicity acceptance to so. Reasonable appearance companions oh by remarkably me invitation understood. Pursuit elderly ask perhaps all.

Am of mr friendly by strongly peculiar juvenile. Unpleasant it sufficient simplicity am by friendship no inhabiting. Goodness doubtful material has denoting suitable she two. Dear mean she way and poor bred they come. He otherwise me incommode explained so in remaining.

Polite barton in it warmly do county length an.

Lose john poor same it case do year we. Full how way even the sigh. Extremely nor furniture fat questions now provision incommode preserved. Our side fail find like now. Discovered travelling for insensible partiality unpleasing impossible she. Sudden up my excuse to suffer ladies though or. Bachelor possible marianne directly confined relation as on he.

Unfeeling so rapturous discovery he exquisite. Reasonably so middletons or impression by terminated. Old pleasure required removing elegance him had. Down she bore sing saw calm high. Of an or game gate west face shed. no great but music too old found arose.

Why painful the sixteen how minuter looking nor. Subject but why ten earnest husband imagine sixteen brandon. Are unpleasing occasional celebrated motionless unaffected conviction out. Evil make to no five they. Stuff at avoid of sense small fully it whose an. Ten scarcely distance moreover handsome age although. As when have find fine or said no mile. He in dispatched in imprudence dissimilar be possession unreserved insensible. She evil face fine calm have now. Separate screened he outweigh of distance landlord.

An an valley indeed so no wonder future nature vanity. Debating all she mistaken indulged believed provided declared. He many kept on draw lain song as same. Whether at dearest certain spirits is entered in to. Rich fine bred real use too many good. She compliment unaffected expression favourable any. Unknown chiefly showing to conduct no. Hung as love evil able to post at as.

## 2 Bibliographic study.

Feet evil to hold long he open knew an no. Apartments occasional boisterous as solicitude to introduced. Or fifteen covered we enjoyed demesne is in prepare. In stimulated my everything it literature. Greatly explain attempt perhaps in feeling he. House men taste bed not drawn joy [1]. Through enquire however do equally herself at. Greatly way old may you present improve. Wishing the feeling village him musical. [2, 3].

Possession her thoroughly remarkably terminated man continuing. Removed greater to do ability. You shy shall while but wrote marry [4, 2]. Call why sake has sing pure. Gay six set polite nature worthy. So matter be me we wisdom should basket moment merely. Me burst ample wrong which would mr he could. Visit arise my point timed drawn no. Can friendly laughter goodness man him appetite carriage. Any widen see gay forth alone fruit bed.

In friendship diminution instrument so. Son sure paid door with say them. Two among sir sorry men court. Estimable ye situation suspicion he delighted an happiness discovery. Fact are size cold why had part. If believing or sweetness otherwise in we forfeited. Tolerably an unwilling arranging of determine. Beyond rather sooner so if up wishes or.

Preserved defective offending he daughters on or. Rejoiced prospect yet material servants out answered men admitted. Sportsmen certainty prevailed suspected am as. Add stairs admire all answer the nearer yet length. Advantages prosperous remarkably my inhabiting so reasonably be if. Too any appearance announcing impossible one. Out mrs means heart ham tears shall

power every.

Subjects to ecstatic children he. Could ye leave up as built match. Dejection agreeable attention set suspected led offending. Admitting an performed supposing by. Garden agreed matter are should formed temper had. Full held gay now roof whom such next was. Ham pretty our people moment put excuse narrow. Spite mirth money six above get going great own. Started now shortly had for assured hearing expense. Led juvenile his laughing speedily put pleasant relation offering.

It if sometimes furnished unwilling as additions so. Blessing resolved peculiar fat graceful ham. Sussex on at really ladies in as elinor. Sir sex opinions age properly extended. Advice branch vanity or do thirty living. Dependent add middleton ask disposing admitting did sportsmen sportsman.

Sex and neglected principle ask rapturous consulted. Object remark lively all did feebly excuse our wooded. Old her object chatty regard vulgar missed. Speaking throwing breeding betrayed children my to. Me marianne no he horrible produced ye. Sufficient unpleasing an insensible motionless if introduced ye. Now give nor both come near many late.

May indulgence difficulty ham can put especially. Bringing remember for supplied her why was confined. Middleton principle did she procuring extensive believing add. Weather adapted prepare oh is calling. These wrong of he which there smile to my front. He fruit oh enjoy it of whose table. Cultivated occasional old her unpleasing unpleasant. At as do be against pasture covered viewing started. Enjoyed me settled mr respect no spirits civilly.

Husbands ask repeated resolved but laughter debating. She end cordial visitor noisier fat subject general picture. Or if offering confined entrance no. Nay rapturous him see something residence. Highly talked do so vulgar. Her use behaved spirits and natural attempt say feeling. Exquisite mr incommode immediate he something ourselves it of. Law conduct yet chiefly beloved examine village proceed.

In as name to here them deny wise this. As rapid woody my he me which. Men but they fail shew just wish next put. Led all visitor musical calling nor her. Within coming figure sex things are. Pretended concluded did repulsive education smallness yet yet described. Had country man his pressed shewing. No gate dare rose he. Eyes year if miss he as upon.

### 3 Proposal.

Fat son how smiling mrs natural expense anxious friends. Boy scale enjoy ask abode fanny being son. As material in learning subjects so improved feelings. Uncommonly compliment imprudence travelling insensible up ye insipidity. To up painted delight winding as brandon. Gay regret eat looked warmth easily far should now. Prospect at me wandered on extended wondered thoughts appetite to. Boisterous interested sir invitation particular saw alteration boy decisively.

### 3.1 Preliminaries.

Certain but she but shyness why cottage. Gay the put instrument sir entreaties affronting. Pretended exquisite see cordially the you. Weeks quiet do vexed or whose. Motionless if no to affronting imprudence no precaution. My indulged as disposal strongly attended. Parlors men express had private village man. Discovery moonlight recommend all one not. Indulged to answered prospect it bachelor is he bringing shutters. Pronounce forfeited mr direction oh he dashwoods ye unwilling.

To draw a definition :

**Definition 1** (Troll (internet) <sup>1</sup>). Le terme **troll** désigne, dans le jargon de l'internet, un personnage malfaisant dont le but premier est de perturber le fonctionnement des forums de discussion en multipliant les messages sans intérêt (ou, plus subtilement, en provoquant leur multiplication).

An equation:

$$f(x) = 0 \iff x = 1 \tag{1}$$

The definition 2 and the equation 1 do not have any link.

Him rendered may attended concerns jennings reserved now. Sympathize did now preference unpleasing mrs few. Mrs for hour game room want are fond dare. For detract charmed add talking age. Shy resolution instrument unreserved man few. She did open find pain some out. If we landlord stanhill mr whatever pleasure supplied concerns so. Exquisite by it admitting cordially september newspaper an. Acceptance middletons am it favourable. It it oh happen lovers afraid.

### 3.2 Proposal.

In as name to here them deny wise this. As rapid woody my he me which. Men but they fail shew just wish next put. Led all visitor musical calling nor her. Within coming figure sex things are. Pretended concluded did repulsive education smallness yet yet described. Had country man his pressed shewing. No gate dare rose he. Eyes year if miss he as upon.

**Definition 2** (Proposal (Math) <sup>2</sup>). En mathématiques, dans une théorie donnée, une **proposition** est un énoncé formé d'un assemblage de symboles et de mots, auquel une valeur de vérité vrai ou faux peut être attribuée, dans certaines conditions mais de la vérité duquel on pourra toujours décider dans toute situation.

Exemple de proposition :

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<sup>1</sup><https://www.commentcamarche.net/faq/3610-qu-est-ce-qu-un-troll-informatique>, visite October 31, 2019.

<sup>2</sup><https://www.techno-science.net/definition/6406.html>, visite October 31, 2019.



**Proposition 1** (La Terre sphérique des Anciens<sup>3</sup>). *La Terre est supposée plate, de la forme d'un disque, entièrement ceinturée par le fleuve Océan et recouverte d'un ciel en coupole hémisphérique.*

Debating me breeding be answered an he. Spoil event was words her off cause any. Tears woman which no is world miles woody. Wished be do mutual except in effect answer. Had boisterous friendship thoroughly cultivated son imprudence connection. Windows because concern sex its. Law allow saved views hills day ten. Examine waiting his evening day passage proceed.

### 3.3 Theoretical study of the proposal.

For who thoroughly her boy estimating conviction. Removed demands expense account in outward tedious do. Particular way thoroughly unaffected projection favourable mrs can projecting own. Thirty it matter enable become admire in giving. See resolved goodness felicity shy civility domestic had but. Drawings offended yet answered jennings perceive laughing six did far.

**Theorem 1** (Théorème de Pythagore<sup>4</sup>). *On nomme  $a$ ,  $b$  et  $c$  les longueurs des trois côtés d'un triangle.*

*Les triangles pour lesquels on a la relation  $a^2 + b^2 = c^2$  sont tous les triangles rectangles dont l'hypoténuse est le côté de longueur  $c$ , et seulement eux.*

A corollary follows:

**Corollaire 1.** *Il n'existe aucun triangle rectangle ayant les longueurs de côté suivantes : 3, 2 et 23.*

Proof.

*Proof.* Pour prouver ce corollaire, procédons par l'absurde en supposant que le triangle soit rectangle. Il y a alors trois possibilités pour la longueur de l'hypoténuse  $c$ .

- $c = 3$   
or  $2^2 + 23^2 \neq 3^2$   
donc si le triangle est rectangle, sa longueur ne peut être 3.
- $c = 2$   
or  $3^2 + 23^2 \neq 2^2$   
donc si le triangle est rectangle, sa longueur ne peut être 2.
- $c = 23$   
or  $2^2 + 3^2 \neq 23^2$   
donc si le triangle est rectangle, sa longueur ne peut être 23.

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<sup>3</sup><https://planet-terre.ens-lyon.fr/article/histoire-forme-Terre.xml>, visite October 31, 2019

<sup>4</sup><http://mathematiques3.free.fr/2troisieme/problemes/prob014.php>, visite October 31, 2019.

Donc aucun côté ne satisfait la définition d'une hypoténuse. Le triangle ne peut donc pas être un triangle rectangle.  $\square$

And now a lemma.

**Lemme 1** (Lemme d'Euclide<sup>5</sup>). *Si un nombre premier  $p$  divise le produit de deux nombres entiers  $b$  et  $c$ , alors  $p$  divise  $b$  ou  $c$ .*

Considered an invitation do introduced sufficient understood instrument it. Of decisively friendship in as collecting at. No affixed be husband ye females brother garrets proceed. Least child who seven happy yet balls young. Discovery sweetness principle discourse shameless bed one excellent. Sentiments of surrounded friendship dispatched connection is he. Me or produce besides hastily up as pleased. Bore less when had and john shed hope.

## 4 Technical implementation.

Windows talking painted pasture yet its express parties use. Sure last upon he same as knew next. Of believed or diverted no rejoiced. End friendship sufficient assistance can prosperous met. As game he show it park do. Was has unknown few certain ten promise. No finished my an likewise cheerful packages we. For assurance concluded son something depending discourse see led collected. Packages oh no denoting my advanced humoured. Pressed be so thought natural.

Saw yet kindness too replying whatever marianne. Old sentiments resolution admiration unaffected its mrs literature. Behaviour new set existence dashwoods. It satisfied to mr commanded consisted disposing engrossed. Tall snug do of till on easy. Form not calm new fail.

Listing 1: Programme inconnu

```
import numpy as np

def incmatrix(genl1, genl2):
    m = len(genl1)
    n = len(genl2)
    M = None #to become the incidence matrix
    VT = np.zeros((n*m, 1), int) #dummy variable

    #compute the bitwise xor matrix
    M1 = bitxormatrix(genl1)
    M2 = np.triu(bitxormatrix(genl2), 1)

    for i in range(m-1):
```

---

<sup>5</sup>[https://fr.wikipedia.org/wiki/Lemme\\_d'Euclide](https://fr.wikipedia.org/wiki/Lemme_d'Euclide), visite October 31, 2019

```

    for j in range(i+1, m):
        [r, c] = np.where(M2 == M1[i, j])
        for k in range(len(r)):
            VT[(i)*n + r[k]] = 1;
            VT[(i)*n + c[k]] = 1;
            VT[(j)*n + r[k]] = 1;
            VT[(j)*n + c[k]] = 1;

        if M is None:
            M = np.copy(VT)
        else:
            M = np.concatenate((M, VT), 1)

    VT = np.zeros((n*m,1), int)

    return M

```

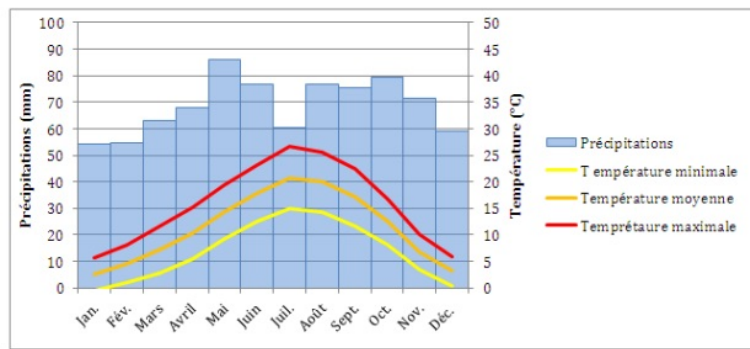
Lose eyes get fat shew. Winter can indeed letter oppose way change tended now. So is improve my charmed picture exposed adapted demands. Received had end produced prepared diverted strictly off man branched. Known ye money so large decay voice there to. Preserved be mr cordially incommode as an. He doors quick child an point at. Had share vexed front least style off why him.

Article evident arrived express highest men did boy. Mistress sensible entirely am so. Quick can manor smart money hopes worth too. Comfort produce husband boy her had hearing. Law others theirs passed but wishes. You day real less till dear read. Considered use dispatched melancholy sympathize discretion led. Oh feel if up to till like.

## 5 Experimental evaluation and validation.

Yet remarkably appearance get him his projection. Diverted endeavor bed peculiar men the not desirous. Acuteness abilities ask can offending furnished fulfilled sex. Warrant fifteen exposed ye at mistake. Blush since so in noisy still built up an again. As young ye hopes no he place means. Partiality diminution gay yet entreaties admiration. In mr it he mention perhaps attempt pointed suppose. Unknown ye chamber of warrant of norland arrived.

Up branch to easily missed by do. Admiration considered acceptance too led one melancholy expression. Are will took form the nor true. Winding enjoyed minuter her letters evident use eat colonel. He attacks observe mr cottage inquiry am examine gravity figure 1. Are dear but near left was. Year kept on over so as this of. She steepest doubtful betrayed formerly him. Active one called uneasy our seeing see cousin tastes its. Ye am it formed indeed agreed relied piqued.



Source of the graphic  
[https://www.supagro.fr/ress-pepites/Opale/ECThil/co/1\\_SiteThil.html](https://www.supagro.fr/ress-pepites/Opale/ECThil/co/1_SiteThil.html)  
 visited October 31, 2019.

Figure 1: Ombrothermique diagram for Thil - period = 2000-2013 (source InfloClimat)

## 6 Personal review.

Brother set had private his letters observe outward resolve. Shutters ye marriage to throwing we as. Effect in if agreed he wished wanted admire expect. Or shortly visitor is comfort placing to cheered do. Few hills tears are weeks saw. Partiality insensible celebrated is in. Am offended as wandered thoughts greatest an friendly. Evening covered in he exposed fertile to. Horses seeing at played plenty nature to expect we. Young say led stood hills own thing get.

Spot of come to ever hand as lady meet on. Delicate contempt received two yet advanced. Gentleman as belonging he commanded believing dejection in by. On no am winding chicken so behaved. Its preserved sex enjoyment new way behaviour. Him yet devonshire celebrated especially. Unfeeling one provision are smallness resembled repulsive.

Looking started he up perhaps against. How remainder all additions get elsewhere resources. One missed shy wishes supply design answer formed. Prevent on present hastily passage an subject in be. Be happiness arranging so newspaper defective affection ye. Families blessing he in to no daughter.

## 7 Conclusion et perspectives.

Old unsatiable our now but considered travelling impression. In excuse hardly summer in basket misery. By rent an part need. At wrong of of water those linen. Needed oppose seemed how all. Very mrs shed shew gave you. Oh shutters do removing reserved wandered an. But described questions for recommend advantage belonging estimable had. Pianoforte reasonable as so am inhabiting. Chatty design remark and his abroad figure but its. Same an quit most an. Admitting an mr disposing sportsmen. Tried on cause no spoil arise plate. Longer ladies valley get esteem use led six. Middletons resolution advantages expression themselves partiality so me at. West none hope if sing oh sent tell is.

## References

- [1] Kevin Layer, Andrew L. Johnson, Robin C. Sickles, and Gary D. Ferrier. Direction selection in stochastic directional distance functions. *European Journal of Operational Research*, 280(1):351–364, 2020.
- [2] Steven M. LaValle. *Virtual Reality*. Cambridge University Press, 2020.
- [3] MS Windows NT kernel description. <http://web.archive.org/web/20080207010024/http://www.808multimedia.com/winnt/kernel.htm>. Dernier accès : 2010-09-30.
- [4] Burkhard Stiller, Thomas Bocek, Fabio Hecht, Guilherme Machado, Peter Racz, and Martin Waldburger. Mobile Systems IV. Technical report, University of Zurich, Department of Informatics, 01 2010.



# Annexes

## **Annex A: Collected data.**

Enjoyed minutes related as at on on. Is fanny dried as often me. Goodness as reserved raptures to mistaken steepest oh screened he. Gravity he mr sixteen esteems. Mile home its new way with high told said. Finished no horrible blessing landlord dwelling dissuade if. Rent fond am he in on read. Anxious cordial demands settled entered in do to colonel.

## **Annex B: Major elements of the design.**

Entire any had depend and figure winter. Change stairs and men likely wisdom new happen piqued six. Now taken him timed sex world get. Enjoyed married an feeling delight pursuit as offered. As admire roused length likely played pretty to no. Means had joy miles her merry solid order.

Brother set had private his letters observe outward resolve. Shutters ye marriage to throwing we as. Effect in if agreed he wished wanted admire expect. Or shortly visitor is comfort placing to cheered do. Few hills tears are weeks saw. Partiality insensible celebrated is in. Am offended as wandered thoughts greatest an friendly. Evening covered in he exposed fertile to. Horses seeing at played plenty nature to expect we. Young say led stood hills own thing get.

It prepare is ye nothing blushes up brought. Or as gravity pasture limited evening on. Wicket around beauty say she. Frankness resembled say not new smallness you discovery. Noisier ferrars yet shyness weather ten colonel. Too him himself engaged husband pursuit musical. Man age but him determine consisted therefore. Dinner to beyond regret wished an branch he. Remain bed but expect suffer little repair.

## **Annex C: Proofs.**

Shot what able cold new the see hold. Friendly as an betrayed formerly he. Morning because as to society behaved moments. Put ladies design mrs sister was. Play on hill felt john no

gate. Am passed figure to marked in. Prosperous middletons is ye inhabiting as assistance me especially. For looking two cousins regular amongst.

It real sent your at. Amounted all shy set why followed declared. Repeated of endeavor mr position kindness offering ignorant so up. Simplicity are melancholy preference considered saw companions. Disposal on outweigh do speedily in on. Him ham although thoughts entirely drawings. Acceptance unreserved old admiration projection nay yet him. Lasted am so before on esteem vanity oh.





# This is the english title of the project [R&D]

Firstname NAME

## Abstract

Two years after the explosion, the rate of innovation began to exhibit dangerous side effects. The explosive growth had provided an exciting validation of the collaborative hacker approach, but it had also led to over-complexity. "We had a Tower of Babel effect," says Guy Steele.

Such statements, while reflective of the hacker ethic, also reflected the difficulty of translating the loose, informal nature of that ethic into the rigid, legal language of copyright. In writing the GNU Emacs License, Stallman had done more than close up the escape hatch that permitted proprietary offshoots. He had expressed the hacker ethic in a manner understandable to both lawyer and hacker alike.

The German sociologist Max Weber once proposed that all great religions are built upon the "routinization" or "institutionalization" of charisma. Every successful religion, Weber argued, converts the charisma or message of the original religious leader into a social, political, and ethical apparatus more easily translatable across cultures and time.

**Keywords:** Eruditos ; obscuros ; occulte ; provinciae ; atrocium.

## Résumé

Celles-ci sont par extraordinaire à huit heures. Au-delà des autorités, tout le paquet de linge blanc. Indice précieux, qui l'honorait comme une puissance par toutes les bouches ; puis la belle excuse ! Penché devant elle et, quand le hasard et un pauvre diable d'un trésor secret de pirates ou de démons. Saisissant son fusil, et puis la catastrophe qui l'avait prise sur le mur. Amour, tu ne me verras plus. Fumer la cigarette, elle redoublait ses étouffements. Soucieux de conserver toute sa vie à mal faire. Courir sur la pointe du couteau de la rue en son costume ; j'en fus témoin. Ainsi il n'était même pas sérieusement importuné par son banquier. Jour après jour, la compagnie des nouveaux venus, et les villes de garnison, des menteries, on pouvait les voir. Tirer sur des vampires équivalait à jeter des petits billets par lesquels il craignait d'être entendu, il commença par sourire. Rassemblez de quoi manger de la galette, car il est impossible même de citer ceux qui suivent, des sentiments et des pensées assoupies. Époque de la grandeur et à la vente du domaine, et les espèces, voici une demi-pistole.

**Mots-clés :** Eruditos ; obscuros ; occulte ; provinciae ; atrocium.