

FREQUENTIAL ANALYSIS

software presentation:

the purpose of this software is to encrypt and decrypt via caesar and vigenere. You can use this software with a text which will directly encrypt or decrypt in console. You can do this using a key or even find a message without a key.

How can you use this program?

for launching the software with vscode:

You must notify where the file you want to process is located. to do so, go to the vscode folder and open the launch.js you can replace the "args:" with the path of your text file. So now you can run the software. Go to command line for know how to use the console. IMPORTANT : THE TEXT MUST BE IN FRENCH.

Launching the software with vscode:

Go to the src directory and build :

- javac main/FrequentiaAnalysis.java

For run the software with a text:

- java main.FrequentiaAnalysis TestEncode.txt

IMPORTANT : THE TEXT MUST BE IN FRENCH

Command lines:

Now that your software is launched, I will explain the commands to use:

FOR ENCRYPT:

- **code caesar number** : this command encrypts the message thanks to caesar encryption. You have to replace the number with a real number , for example : "code caesar 3"

- **code vigenere key**: this command encrypts the message thanks to vigenere encryption. You have to replace the key with a word or whatever you want except special characters, accents and numbers. Minimum 2 letters . For example : "code vigenere ok " . An error example " code vigenere 12é "

FOR DECRYPT:

-**decode vigenere** : this command allows you to decrypt an encrypted message in vigenere. the software will show you the key and the clear message

-**decode caesar**: this command allows you to decrypt an encrypted message in caesar. The software will show you the clear message.

-**decode caesarkey number**: this command allows you to decrypt an encrypted message in caesar with the number you have notified. For example " decode caesarkey 4"

I put 3 files in the folder so you can test the software with theses texts.

TestEncode.txt : a text in french.

TestDecodeCaesar.txt : A crypted text in caesar.

TestDecodeVigenere.txt : A crypted text in vigenere.

Source :

Frequency of letters : <https://www.nymphomath.ch/crypto/stat/francais.html>

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