

User Guide

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How to Set Up and Use Cogger

Introduction

Cogger is a substitution cipher written in Python 3 and has been released under the MIT license. This works by allowing you to define a custom amount of set of IDs (wheel keys).

Here is an example of how a 2 wheeled-key would work:

| Original Key: 1-0-2-3+3-2-1-0 | U | ı | 2 |
|---------------------------------------|----|---|----------|
| Character set: 0:A-S-D-F | A | S | D |
| Message: ASDFA | | | _ |
| | 1 | 1 | 2 |
| Start Encryption: | S | S | D |
| Key state 1-0-2-3+3-2-1-0 | • | • | |
| A(0) becomes S (1) which becomes D(2) | 2 | 0 | 3 |
| key state 2-1-3-0+3-2-1-0 | _ | _ | _ |
| S(1) becomes S(1) which becomes D(2) | D | A | F |
| Key state 3-2-0-1+3-2-1-0 | • | • | • |
| D(2) becomes A(0) which becomes F(3) | 3 | 2 | ı |
| Key state 0-3-1-2+3-2-1-0 | F | D | S |
| F(3) becomes D(2) which becomes S(1) | _ | _ | |
| Key state 1-0-2-3+0-3-2-1 | 0 | 1 | 3 |
| A(0) becomes S(1) which becomes F(3) | Α. | c | - |
| Your final encrypted message DDFSF | A | 3 | - |

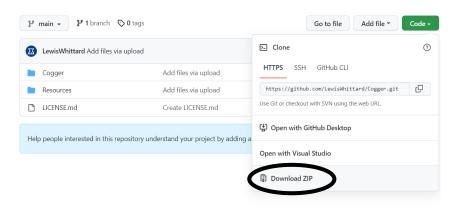
```
Please enter a Number:1
What is your key:1-0-2-3+3-2-1-0
What is your message:ASDFA
DDFSF
```



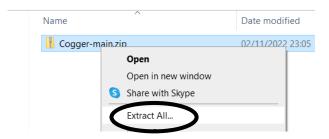
Screenshot of Cogger using the same Configuration as shown in the example.

Set Up

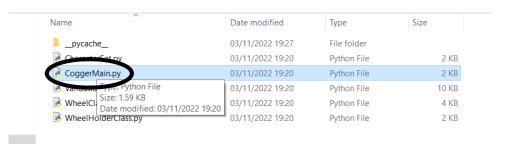
- 1.You need to download python from: https://www.python.org/
- 2. Then you need to download the repository from: https://github.com/LewisWhittard/Cogger



3.Then extract the cogger-main zip file.



4. And open the file "Cogger/Coggermain.py".



Encryption

1.Enter 0 to generate a key:

Cogger • © Lewis Whittard 2022 • MIT License • Version: 1.0.0 0: Genarate a key 1: Encrypt 2: Decrypt 3: Quit Please enter a Number:0

2.Then specify how many wheels you want:

How many wheels:3

3. Notice you have generated your key:

99.2 75. 29.9 -96.13 -96.13 -96.13 -96.12 -96.13 -

4. Enter 1 to encrypt:

Please enter a Number:1

4 Then paste your key:

5 Then input your unencrypted message:

What is your message:The quick brown fox jumps over the lazy dog.

6 Copy your encrypted message from Cogger:

>1(^>xMYec u+_~Z;J:%*hUgCr:id]5hGUu).%JQP[tR

7 Use your encrypted message however you want!

Decryption

1. Press 2 to decrypt:

Please enter a Number:2

2 Then paste your key:

3 And input your encrypted message:

What is your message:>1(^>xMYec u+_~Z;J:%*hUgCr:id]5hGUu).%JQP[tR

4 Cogger will then output your decrypted message:

The quick brown fox jumps over the lazy dog.

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Cogger License

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