



Cogger

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 wheel keyed cogger would work:

Key: 1-0-2-3+3-2-1-0 Character set: ASDF Message: ASDFA

			Character Set:
			A-S-D-F+A-S-D-F
A	1	2	1-0-2-3+3-2-1-0
	S	D	
S	1	2	2-1-3-0+3-2-1-0
	S	D	
D	0	3	3-2-0-1+3-2-1-0
	A	F	
F	2	1	0-3-1-2+3-2-1-0
	D	S	
A	1	3	1-0-2-3+0-3-2-1
	S	F	

Your final encrypted message DDFSF:

In order to run Cogger you will need to install Python this has been tested with Python 3.11.0 and can be downloaded here:

<https://www.python.org/>

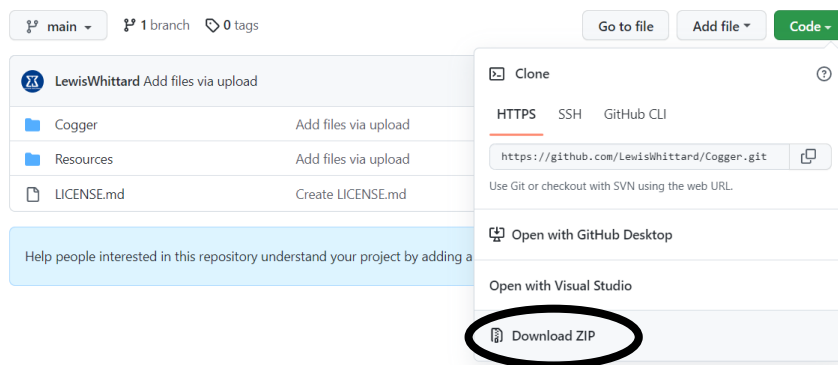
Cogger can be downloaded from the following Github repository:

<https://github.com/LewisWhittard/Cogger>

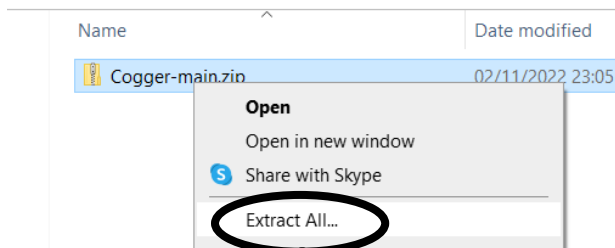
Set Up

1. You need to download python from:
<https://www.python.org/>

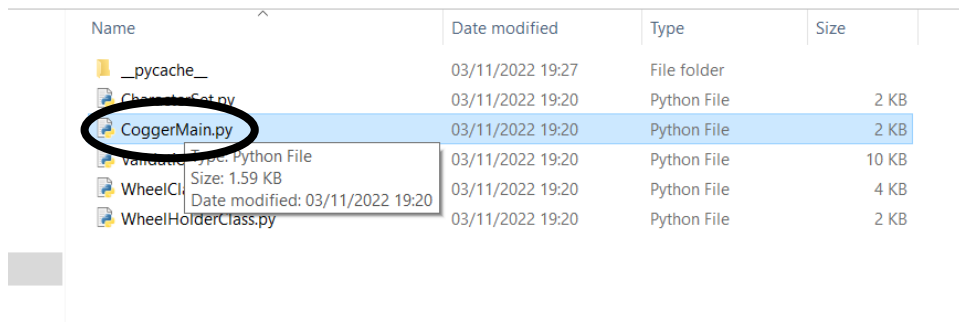
2. Then you need to download the repository from:
<https://github.com/LewisWhittard/Cogger>



3. Then extract the cogger-main zip file.



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



Encrypt

1. Enter 0 to generate a Key:

```
Cogger • © Lewis Whittard 2022 • MIT License • Version: 1.0.0
0: Generate 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:

```
39-2-76-29-9-56-13-50-19-34-26-12-28-38-32-37-10-55-53-17-91-49-43-59-3-86-62-65-61-54-64-52-35-11-78-24-69-51-67-30-61-18-5-20-22-70-31-82-77-88-94-57-63-1-41-66-83-16-76-21-7-93-92-87-25-14-45-8-85-36-64-90-4-48-0-74-33-15-73-58-44-23-6-68-95-60-72-27-46-71-79-89-80-42-40-13-53-5-84-16-82-51-41-87-15-85-2-91-28-14-57-49-0-86-36-44-79-94-10-1-64-23-4-43-37-58-26-76-74-59-73-8-29-22-18-62-40-80-56-72-54-35-93-67-17-92-34-71-70-45-46-7-38-42-52-39-69-27-68-9-12-55-3-65-88-75-95-47-30-48-21-83-60-11-6-66-31-81-24-77-61-33-63-50-90-78-89-25-20-32-19-80-89-9-27-0-7-18-1-28-32-74-51-56-36-10-38-49-39-63-23-90-34-20-62-47-40-2-7-0-16-72-93-52-86-31-12-95-25-78-61-13-84-41-92-11-45-43-22-5-4-77-46-15-48-19-87-82-64-73-81-70-50-17-35-42-54-83-3-88-6-66-79-29-85-60-58-69-59-71-44-53-26-21-91-30-14-55-8-75-33-68-67-24-65-57-94-37
```

4. Enter 1 to encrypt:

```
Please enter a Number:1
```

4 Then paste your key:

```
What is your key:39-2-75-29-9-56-13-50-19-34-26-12-28-38-32-37-10-55-53-17-91-49-43-59-3-86-62-65-61-54-64-52-35-11-78-24-69-51-67-30-61-18-5-20-22-70-31-82-77-88-94-57-63-1-41-66-83-16-76-21-7-93-92-87-25-14-45-8-85-36-64-90-4-48-0-74-33-15-73-58-44-23-6-68-95-60-72-27-46-71-79-89-80-42-40-13-53-5-84-16-82-51-41-87-15-85-2-91-28-14-57-49-0-86-36-44-79-94-10-1-64-23-4-43-37-58-26-76-74-59-73-8-29-22-18-62-40-80-56-72-54-35-93-67-17-92-34-71-70-45-46-7-38-42-52-39-69-27-68-9-12-55-3-65-88-75-95-47-30-48-21-83-60-11-6-66-31-81-24-77-61-33-63-50-90-78-89-25-20-32-19-80-89-9-27-0-7-18-1-28-32-74-51-56-36-10-38-49-39-63-23-90-34-20-62-47-40-2-7-0-16-72-93-52-86-31-12-95-25-78-61-13-84-41-92-11-45-43-22-5-4-77-46-15-48-19-87-82-64-73-81-70-50-17-35-42-54-83-3-88-6-66-79-29-85-60-58-69-59-71-44-53-26-21-91-30-14-55-8-75-33-68-67-24-65-57-94-37
```

5 Then input your unencrypted message:

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

6 Then notice Cogger outputs an encrypted message and take a copy of it:

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

Decrypt

1. Press 2 to decrypt:

Please enter a Number:2

2 Then paste your key:

What is your key:39-2-75-29-9-56-13-80-19-34-26-12-28-38-32-37-10-55-53-17-91-49-43-59-3-86-62-65-81-54-64-52-35-11-78-24-69-51-67-30-61-18-5-20-22-70-31-82-77-88-94-57-63-1-41-66-83-16-76-21-7-93-92-87-25-14-45-8-05-36-84-90-47-4-48-0-74-33-15-73-58-44-23-6-68-95-60-72-27-46-71-79-89-80-42-40-13-53-5-84-16-82-51-41-87-15-85-2-01-28-14-57-49-0-86-36-44-70-94-10-1-64-23-4-43-37-58-26-76-74-59-73-8-29-22-18-62-40-80-56-7-2-54-35-93-67-17-92-34-71-70-45-46-7-38-42-52-39-69-27-68-9-12-55-3-65-88-75-95-47-30-48-21-83-60-11-6-66-31-81-24-77-61-33-63-50-90-78-89-25-20-32-19-80-89-9-27-0-7-18-1-28-32-74-51-56-36-10-38-49-39-63-23-90-3-4-20-62-47-48-2-76-16-72-93-52-86-31-12-95-25-78-61-13-84-41-92-11-45-43-22-5-4-77-46-15-48-19-87-82-64-73-81-70-50-17-35-42-54-83-3-88-6-66-79-29-85-60-58-69-59-71-44-53-26-21-91-30-14-55-8-75-33-68-67-24-65-57-94-37

3 And input your encrypted message:

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

4 Notice Cogger outputs an unencrypted message:

The quick brown fox jumps over the lazy dog.

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Cogger License

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