

# Requirements

Python 3.7

I used MacOS, but can be run on any OS that has python 3.7.

## Running

To encrypt:

```
python3 ./src/main.py encrypt
```

To decrypt:

```
python3 ./src/main.py decrypt
```

If you want to change the encryption, just modify the key.txt file.(keep in mind it can only be 4 chars)

To run key generator:

```
python3 ./src/main.py key_generator
```

It will prompt you to enter lambda, and then calculate.

## Outputs

Encryption screenshot:

```
Cadens-MacBook-Pro:otp_m08509012 cadenlawrence$ python3 ./src/main.py encrypt
0b1011110000000100000101000110000001
```

- The 0b is python's method to say it is binary and base 2.
- Also outputs in corresponding file.

Decryption output:

```
Cadens-MacBook-Pro:otp_m08509012 cadenlawrence$ python3 ./src/main.py decrypt
bear
```

- Also outputs in corresponding file.

Key Generator output:

```
Cadens-MacBook-Pro:otp_m08509012 cadenlawrence$ python3 ./src/main.py key_generator
How many bits do you want it to be? 32
4.0
eq2S
Cadens-MacBook-Pro:otp_m08509012 cadenlawrence$ python3 ./src/main.py key_generator
How many bits do you want it to be? 100
0MwZ8QR5E43P
```

- Also outputs in corresponding file.