COMP 7402 - Assignment 3

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Usage

For dependencies: npm install

Usage: index [options]

Options:

-V, --version output the version number

-f, --file <file> File location is relative to JS file

-k, --key <key> Required only when mode is set to decrypting

-c, --cypher <cypher> Required only when mode is set to decrypting

-e, --encrypt [encrypt] encryption mode

-d, --decrypt [decrypt] decrypt mode

-h, --help output usage information

Design

Psudocode

Encrpytion

Load input as plain text

Create randomized string of size plain text for key value

XOR plain text and key value to get cypher text

Write key value and cypher text to files

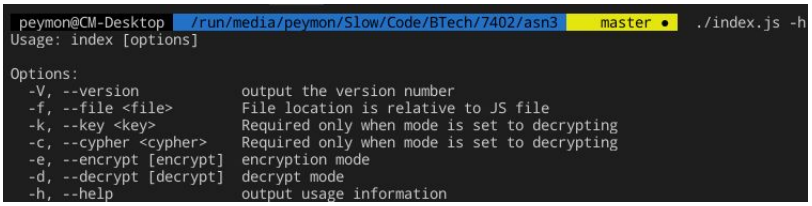
Decrpytion

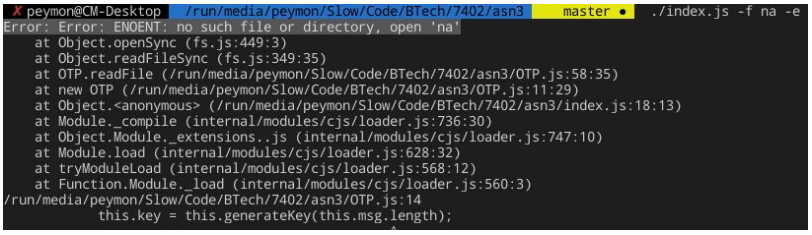
Load key value and cypher text

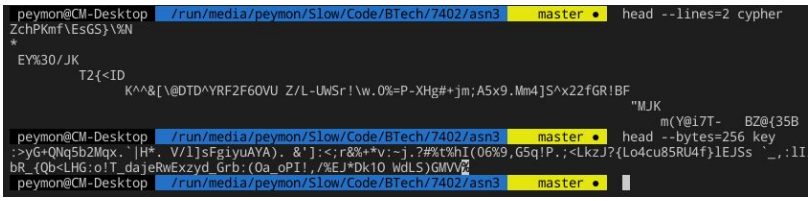
XOR cypher text and key value to get plain text

Write plain text to file

Testing

Test	Print usage
Desired output	./index.js or ./index.js -h
Result	
PASS	

Test	Input file doesn't exist
Desired output	Error with detailed description
Result	
PASS	

Test	Encrypting File
Desired output	Create a file for key and encrypted text
Result	
PASS	

Test	Decrypt file
Desired output	String matching original file
Result	 peymon@CM-Desktop /run/media/peymon/Slow/Code/BTech/7402/asn3 master • head --lines=2 plain !@#$%^&*()_+-=]'/[;.]
PASS	

Test	Unique Encrypting
Desired output	Different sha256sum for the same file
Result	
PASS	