

Permutation encryption

Permutation encryption implementation.

Build and compile

With Makefile

Just execute make in order to compile the source code. The output files will be inside `/build`

```
make
```

Manually

```
g++ ./src/permutation.cpp -o ./build/permutation -std=c++17
```

Usage

Change to the `build` folder to a easier usage:

```
cd build/
```

This project has its own `Usage` Linux like, to view this:

```
./permutation --help
```

Encrypting / Decrypting

NOTE: Sample JSON file already exist

To encrypt, just use `--encrypt` option, with a [JSON configuration file](#) as argument.

```
./permutation --encrypt [JSON file]
```

To decrypt, just use `--decrypt` option, with a [JSON configuration file](#) as argument.

```
./permutation --decrypt [JSON file]
```

View JSON file help on console

To view a JSON file example:

```
./permutation --json example
```

To view the JSON file description:

```
./permutation --json desc
```

To view all above information:

```
./permutation --json all
```

JSON file

JSON file example:

```
{
  "permutation": [3, 2, 1, 0],
  "encrypt": {
    "inputFile": "in.txt",
    "outputFile": "out.txt"
  },
  "decrypt": {
    "inputFile": "out.txt",
    "outputFile": "in.txt"
  }
}
```

NOTE: All the permutations must begin in 0.

`permutation` : An array with a valid permutation with inverse.

`encrypt` and `decrypt` : Define the files to work with. - `inputFile` : Set the input file, path relative to execution environment. - `outputFile` : Set the output file, path relative to execution environment.