

Codons2Peptide

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This script recreates the biological translation of DNA into polypeptides. The DNA sequence can be in the form of a string or a file containing multiple strings. The output can either be printed into a specified file, or, by default, to the stdout.

Only built for Python 3, but no third-party modules are necessary. This script is also only runnable on the command line, and not as an import module.

For any synthetic biologists, changes to the conversion table and allowed nucleotides can be done within the script:

- Conversion table -> line 57
- Legal nucleotides -> line 111

Usage

Run the codons2peptide.py script in the command line:

```
python codons2peptide.py [-h] [-f] [-o OUTPUT] <input-codon>
```

Where:

- **input-codon**: the codon sequence, as a STRING. Unless '-f' is specified.
- **-h, --help**: show a help message.
- **-f, --file**: indicates input is a FILE containing codon sequence(s); one sequence per line.
- **-o OUTPUT, --output OUTPUT**: specifies an output file; will overwrite any existing one.

Example Usage

Run this where the main script is located:

```
python codons2peptide.py -f ./data/codons.txt -o ./data/out.txt
```