https://sites.google.com/pharma.cu.edu.eg/eslam-ibrahim

RTCU Cheat sheet

• RTCU works in all platforms and with different python versions. To overcome all of these varieties, "future" package was added to the source code.

Note: you may need to update future module on your computer by following those commands:

- 1. Download get-pip (https://bootstrap.pypa.io/get-pip.py)
- 2. python get-pip.py install future
- 3. python get-pip.py install future --upgrade

Note: you will need to install Numby and Biopython first by those commands on your cmd (windows):

- 1. pip install numpy
- 2. pip install biopython
- The default working directory is the directory where your rtcu.py located.
- You can use any file in its own directory by specifying the directory before the file's name

```
-in G:\eslam\input.txt -out D:\samir\out.txt
```

• Only one sequence should be in the input file.

Note: Be aware that the program will generate a lot of possibilities and the resulting file size will be huge if there are a lot of variable spots in your sequence.

- The file "original codon usage.txt" contains the format which should be your manual codons.
- You can use the <u>codon usage database</u> to construct your manual file for reverse translation.