Labs

* Write a program called “print-two-args.py” that reads the first two command line arguments after the program name, stores their values as variables, and then prints them on the same line with a colon between.

**> python print-two-args.py hello world**

**hello : world**

* Write a program called “add-two-args.py” that reads the first two command line arguments after the program name, stores their values as variables, and then prints their sum.

Hint: To read an argument as a number, use the syntax “arg1 = float(sys.argv[1])”

**> python add-two-args.py 1 2**

**3.0**

* Write a program called dna2rna.py that reads a DNA sequence from the first command line argument, and then prints it as an RNA sequence. Make sure it works for both uppercase and lowercase input. (T/t 🡪 U/u)

> python dna2rna.py AGTCAGT

ACUCAGU

> python dna2rna.py actcagt

acucagu

> python dna2rna.py ACTCagt

ACUCagu

* Write a program get-codons.py that reads the first command line argument as a DNA sequence and prints the first three codons, one per line, in uppercase letters.

> python get-codons.py TTGCAGTCG

TTG

CAG

TCG

> python get-codons.py TTGCAGTCGATC

TTG

CAG

TCG

> python get-codons.py tcgatcgac

TCG

ATC

GAC

* Write a program that reads a protein sequence as a command line argument and prints the location of the first cysteine residue

> python find-cysteine.py MNDLSGKTVIITGGARGLGAEAARQAVAAGARVVLADVLDEEGAATARELGDAARYQHLDVTIEEDWQRVCAYAREEFGSVDGL

70

> python find-cysteine.py MNDLSGKTVIITGGARGLGAEAARQAVAAGARVVLADVLDEEGAATARELGDAARYQHLDVTIEEDWQRVVAYAREEFGSVDGL

-1