

JS-CC-011: DNA to RNA

Given a DNA strand, return its RNA complement (per RNA transcription).

Both DNA and RNA strands are a sequence of nucleotides.

The four nucleotides found in DNA are adenine (A), cytosine (C), guanine (G) and thymine (T).

The four nucleotides found in RNA are adenine (A), cytosine (C), guanine (G) and uracil (U).

Given a DNA strand, its transcribed RNA strand is formed by replacing each nucleotide with its complement:

 $G \rightarrow C$

 $C \rightarrow G$

 $T \rightarrow A$

A → U

Your function will need to be able to handle invalid inputs by raising a ValueError with a meaningful message.

Learning Outcomes

At the end of the this coding challenge, students will be able to;

- Analyze a problem, identify and apply programming knowledge for appropriate solution.
- Demonstrate their knowledge of algorithmic design principles by using JavaScript and Python effectively.

Problem Statement

• Write a function that takes DNA Strand and convert to RNA Strand.

Happy Coding