

BIOE50010 – Programming 2

Computer Lab 7

Binghuan Li Department of Chemical Engineering

Maria Portela Department of Bioengineering

Wenhao Ding Department of Bioengineering

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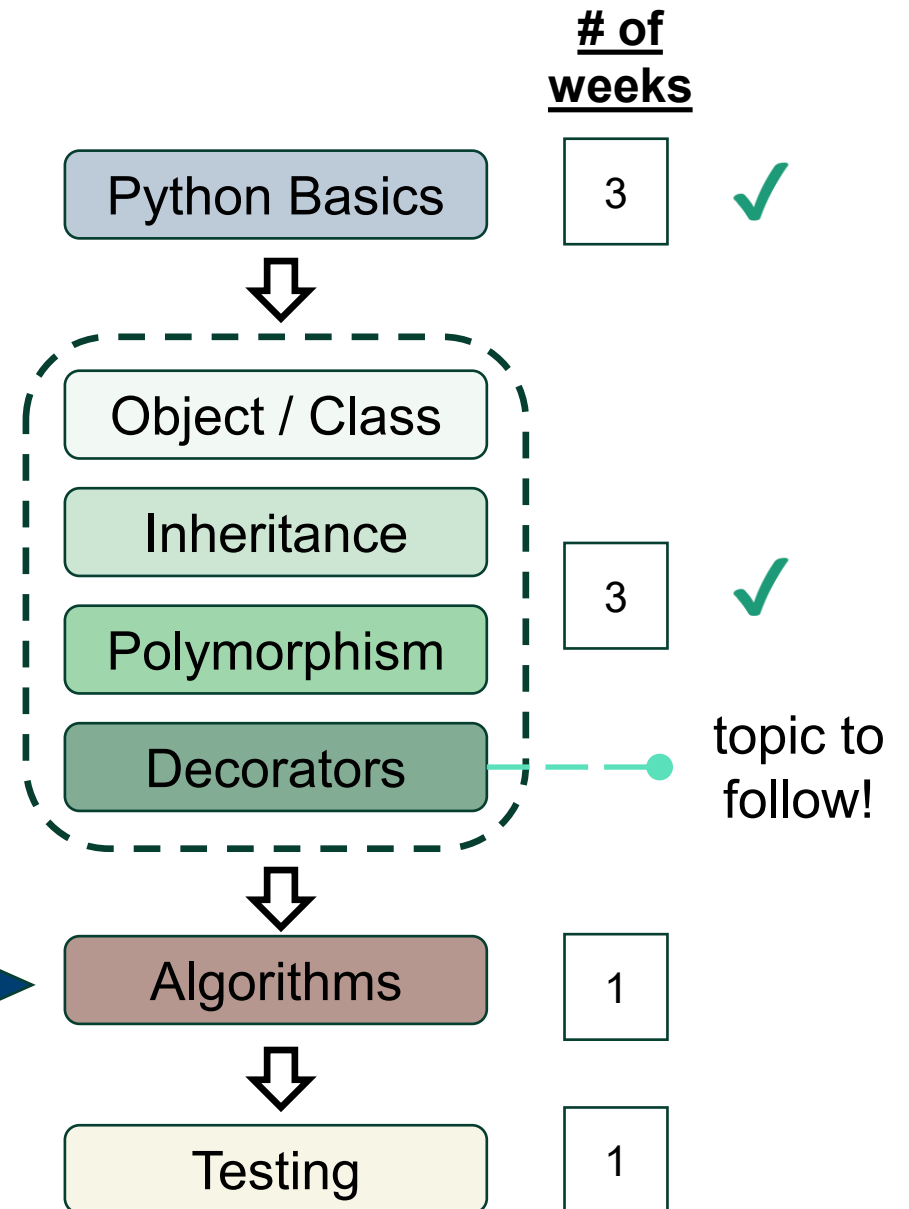
Progress Check

Checklist: you should have mastered...

- **Syntax** for defining and instantiate an OOP class
- Overload operators using **special methods**
- Use **inheritance** to access attributes and methods from the base class(es), design and structure and programme

Questions outside the classroom? **ed** discussion

Week 7:
we are here



Your task today

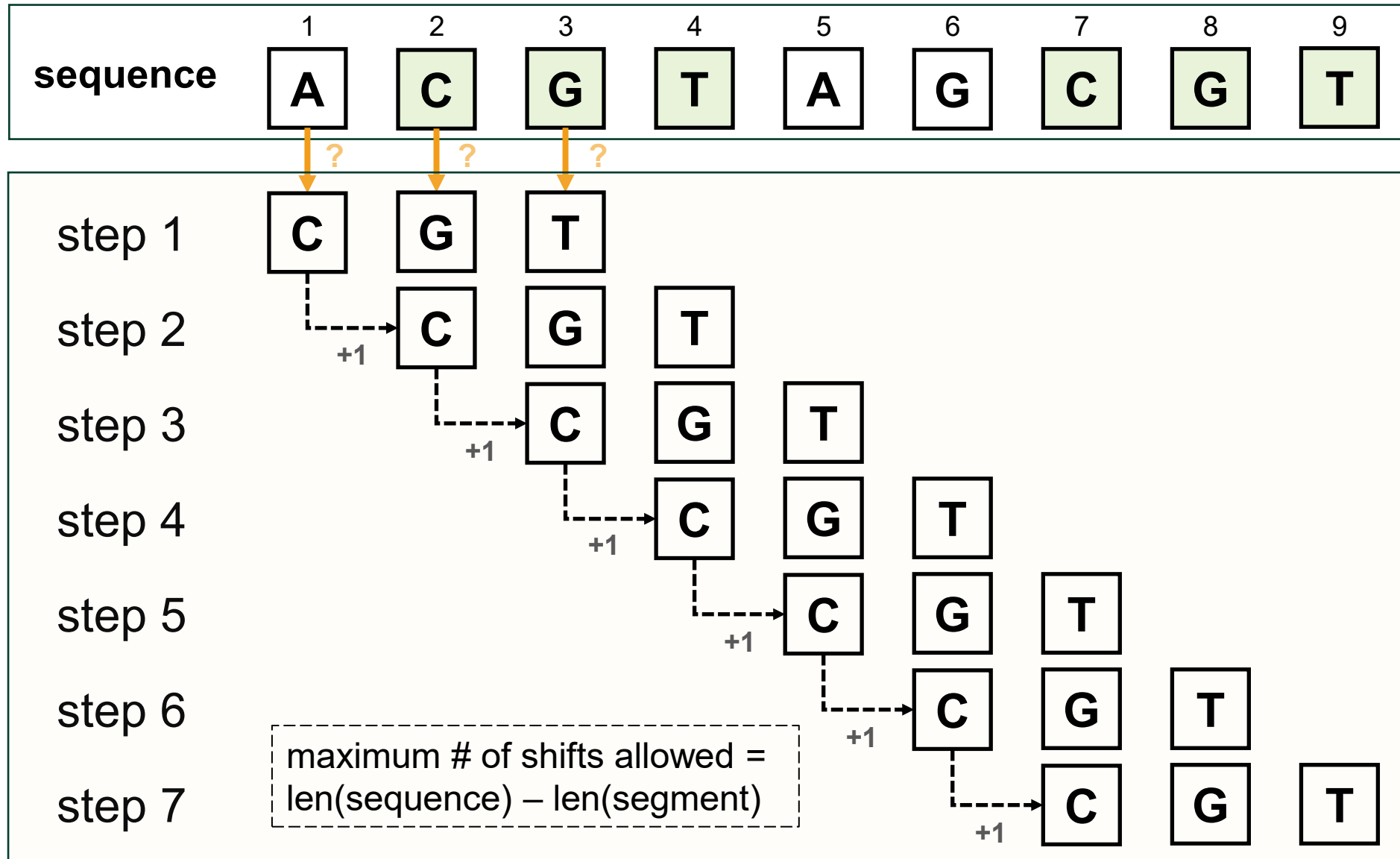
Implementing a `find()` method to the class `Dna` to search a user-defined **DNA segment** within the **DNA database**.

Return the **starting index** of the nucleotide within the DNA database.

To start...

- You are advised to fetch and study the `dna_oop.py` file from Blackboard under the tab '**Solution to Lab 6**' before you start. Make sure you are confident about the logics.
- Read and study the driver script and the sample output from the lab sheet carefully.
- You may assume the length of the DNA segment has a shorter sequence than the length of DNA database – no need to consider overflow and/or paddings.
- Once you have completed – can you optimize and accelerate your code?

One Matching Algorithm – Example



match?

✓ id = 2

✓ id = 7



Questions?

That's it for now.

You can now proceed to the Lab 7 exercises.