Take Home Assignment

Reverse a string

- In this assignment you are going to implement 5 different ‘expressions’ that have the same functionality - to reverse a string.

- You don’t necessarily need to implement 5 plain functions with the same signature. You can also implement any number of your string reversals in other ‘expressions’ like classes, overloaded operators, member functions, templates, closures, decorators, etc. or by extending already existing standard library code. They can work either at Runtime or at Compile Time. Just keep in mind that we need to understand how to use your 5 implementations (e.g. how do we provide a string to your implementation and how do we retrieve the reversed string?)

- You can decide which programming language to use, but stick to a single language for all 5 string reversals.

- Don’t use any 3rd party or external libraries/packages/etc. However, you may use any builtin libraries, tools and functionality (e.g. C++ STL, Python Standard Library, etc.).

- You have to use Git.
    - Your Git repository has to be published either on Gitlab or Github.
    - Create at least one new commit for each of the 5 string reversals.

- The following points are not necessary, but maybe you’d like to earn some bonus points for:
    - Good Git etiquette.
    - Implementing more than 5 ways of reversing a string.
    - Documentation
    - Being creative by adding e.g. a performance evaluation, unit tests, etc.

- When you’re done, send us an email with a link to your public Git{hub,lab} repository.

We are looking for submissions that demonstrate advanced knowledge of builtin language specific concepts, functionality and language independent algorithms. This is a free-form exercise. As long as you can explain your choices, your implementations can be as unconventional as you want! If you’re stuck, Google is your friend.

Have fun and good luck!