

### Assignment - 4

1A. `__iter__` and `__next__` can be used to support iteration overloading in python

2A. They print based on the return value

3A.

# Intercept slice operation

# `slice()` : constructor to create slice object.

#start: An integer number specifying start index. It is optional and default is 0.

#stop: An integer number specifying end index.

#step: An integer number specifying the step of slicing. It is optional and

#default is 1.

#Example 1:

# abcde is string can be

# an array as well.

```
sliced = 'abcde'.__getitem__(slice(0, 2, 1))
```

```
print(sliced)
```

4A. In Immutable targets, such as numbers, strings, and tuples. Inplace operators behave the same as normal operators, i.e only assignment takes place, no modification is taken place in the passed arguments.

`add()` replaced by `iadd()` in case of inplace operator

5A.

The operator overloading in Python means provide extended meaning beyond their predefined operational meaning. Such as, we use the "+" operator for adding two integers as well as joining two strings or merging two lists. We can achieve this as the "+" operator is overloaded by the "int" class and "str" class. The user can notice that the same inbuilt operator or function is showing different behaviour for objects of different classes. This process is known as operator overloading.