Q1. Which two operator overloading methods can you use in your classes to support iteration?

**Answer** : There are two operator overloading methods that can be used to support iteration in classes: \_\_iter\_\_ and \_\_next\_\_. These methods are used to define iterators, which are objects that can be iterated over in a loop.

Q2. In what contexts do the two operator overloading methods manage printing?

Answer : The two operator overloading methods \_\_str\_\_ and \_\_repr\_\_ are commonly used to manage printing and provide string representations of objects in different contexts

Q3. In a class, how do you intercept slice operations?

Answer : To intercept slice operations in a class, you can define the \_\_getitem\_\_ method with support for the slice object.

Q4. In a class, how do you capture in-place addition?

Answer : To capture in-place addition in a class, you can define the \_\_iadd\_\_ method.

Q5. When is it appropriate to use operator overloading?

Answer : Operator overloading is appropriate in situations where it enhances the clarity, expressiveness, and usability of your code.