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

Ans:

1: **\_\_iter\_\_** and **\_\_next\_\_** are the operator overloading methods in python that support iteration and are collectively called iterator protocol.

**2:\_\_iter\_\_** returns the iterator object and is called at the start of the loop in our respective class.

**3:\_\_next\_\_** is called at each loop increment, it returns the incremented value. Also Stopiteration is raised when there is no value to return.

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

Ans:**\_\_str\_\_** and **\_\_repr\_\_** are two operator overloading methods that manage printing.

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

Ans: In a class use of slice() in \_\_getitem\_\_ method is used for intercept slice operation. This slice method is provided with a start integer number, stop integer number and step integer number.

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

Ans:**a+b** is normal addition. Whereas **a+=b** is an in-place addition operation. In this in-place addition **a** itself will store the value of addition. In a class **\_\_iadd\_\_** method is used for this in-place operation

Q5. When is it appropriate to use operator overloading?

Ans: Operator overloading is used when we want to use an operator other than its normal operation to have different meaning according to the context required in user defined function.