

Q1. What is the relationship between classes and modules?

```
1 A module is a collection of classes
```

Q2. How do you make instances and classes?

```
1 class class_name():
2     pass
3
4 instance_name=class_name()
```

Q3. Where and how should be class attributes created?

```
1 immediately after the class declaration inside the class
2
3 class class_name():
4
5     class_attribute1
6     class_attribute2
```

Q4. Where and how are instance attributes created?

```
1 Inside the __init__() method of the class
2
3
4 class class_name():
5     def __init__(self):
6         self.instance_attribute1
7         self.instance_attribute2
```

Q5. What does the term "self" in a Python class mean?

```
1 self is the special keyword which is used to map the method and the attributes to a specific instance
```

Q6. How does a Python class handle operator overloading?

```
1 Python classes uses the magic methods to handle the opeator overloading .
2
3
4 __add__(self,-)__ for "+"
5 __sub__(self,-) for "-"
6 __mul__(self,-) for "*"
7 __div__(self,-) for "/"
8 __eq__(self,-) for "=="
9 __lt__(self,-) for "<"
10 __gt__(self,-) for ">"
11
```

Q7. When do you consider allowing operator overloading of your classes?

```
1 when operator overloading imporoves the rliabilty of the code then we allooe the
  operator overloading of classes
```

Q8. What is the most popular form of operator overloading?

```
1 Arithmetic operator overloading is the most popular form of operator overlading
```

Q9. What are the two most important concepts to grasp in order to comprehend Python OOP code?

```
1 1. Classes and Objects
2 2. Encapsulation
3 3.Inheritance
4 4.Polymorphism
5
```