

1. In your own words, what is object-oriented programming? What are the benefits of OOP?

-Object Oriented Programming focuses on using classes to create objects to organize data instead of focusing on functions and logic. This allows for more organized and easier to read code.

2. What are objects and classes in Python? Come up with a real-world example to illustrate how objects and classes work.

-Objects are the variables and methods while the classes would be the blueprint for the objects. In This example the Class is the recipe and the objects are the ingredients, cooking time and difficulty

3. In your own words, write brief explanations of the following OOP concepts; 100 to 200 words per method is fine.

-Inheritance: This allows for a class to inherit properties from its parent class, inheritance can only transfer from parent to child.

-Polymorphism: A concept that you can access objects of different types through the same interface.

-Operator Overloading: Defining custom behaviors for standard operators like +, -, *