26 Lecture - CS201

Important Subjective

1. **What is a constructor in a class?**
   Answer: A constructor is a special method in a class that is called when an object of that class is created. It is used to initialize the attributes of the object.

2. **What is inheritance in object-oriented programming?**
   Answer: Inheritance is the process of creating a new class from an existing class. The new class inherits the attributes and methods of the existing class, and can add its own attributes and methods as well.

3. **What is encapsulation in object-oriented programming?**
   Answer: Encapsulation is the practice of hiding the internal workings of an object from the outside world, and exposing only a public interface for interacting with the object.

4. **What is polymorphism in object-oriented programming?**
   Answer: Polymorphism is the ability of objects of different classes to be treated as if they were of the same class. This allows for more flexible and dynamic code.

5. **What is a method in a class?**
   Answer: A method is a function defined within a class, which can access and manipulate the data attributes of an object of that class.

6. **What is an instance variable in a class?**
   Answer: An instance variable is a variable defined within a class, and is specific to each object created from that class.

7. **What is a static variable in a class?**
   Answer: A static variable is a variable defined within a class, but is shared by all objects of that class.

8. **What is the difference between a class and an object?**
   Answer: A class is a blueprint or template for creating objects, while an object is an instance of a class.

9. **What is the difference between a method and a function?**
   Answer: A method is a function defined within a class, and is associated with objects of that class. A function, on the other hand, is not associated with any particular class or object.

10. **What is the relationship between a superclass and a subclass?**
    Answer: A subclass is a new class created from an existing class (the superclass), and inherits the attributes and methods of the superclass. The subclass can add its own attributes and methods as well.