What is inheritance and why is it important?

Explain the meaning of Inheritance

Inheritance in object-oriented programming refers to the mechanism by which a class can inherit properties and behaviours from another class. The class that is inherited from is called the base class or parent class, and the class that inherits is the derived class or child class.

Highlight a benefit of Inheritance

One key benefit is code reusability. Inheritance allows the derived class to reuse the attributes and methods of the base class, promoting modular and efficient code development.

Provide an application of Inheritance

A customer is a person. In the same way, a student is a person, and an employee is also a person. They all have some common things, for example, they all have a first name, middle name, and last name. We can create the Person class with first name, middle name, and last name properties and inherit the Customer, Student, and Employee classes from the Person class. That way we don't need to create the same properties in all classes.