***Inheritance***

* Function:
* Class inherits other class is the derived class(child class, subclass), class is inherited by other class is base class (parent class, superclass..)
* Inheritance allows a derived class to inherit other base class attributes.
* Inheritances allow us to reuse code that leads to a reduction in a program.
* Condition to use inheritance:
* All of the class must have an IS-A relationship.
* IS-A relationship: It means that the derived class is a base class, but it can be more specific.
* Ex1: The base class is human, and the derived class is the student. The student is a human. But the student can have gpa, math, class,….etc.
* Ex2: The base class is animals that have mouths, noses, ears, and eyes, and the derived class student also has mouths, noses, ears, and eyes. But we can’t use inheritance because the student is not animals.
* Inheritance types:
* Single inheritances: 1 derived class inherits 1 base class.
* Multilevel inheritance: