LAB 12: Inheritance

We will stop about ITECalculator for a while. In this lab focuses on interitance. This lab will enable you to try out in order to understand about inheritance.

A. Define a base class called Animal that contains two private data members: a string to store the name of the animal (e.g., "Dydy" or "Luci") and an integer member called weight that will contain the weight of the Animal in pounds. Also include a public member method, who(), that displays a message giving the name and weight of the Animal object. Derive two classes named Lion and Cat, using Animal as a public base class. Then, write a main() function to create Lion and Cat objects ("Leo" at 400 pounds and "Lyly" at 30 pounds, say). Demonstrate that the who() member is inherited in both derived

B. In each derived class, please overrid the who() method of base class so that the output message also identifies the name of the class. Now change the function main() to call the base class version of who() as well as the derived class version, for each of the derived class objects.

C. Define a Person class containing data members for age, name, and gender. Derive a class called Employee from Person that adds a data member to store a personnel number. Derive a further class Executive from Employee. Each derived class should define a method that displays information about what it is. (Name and type will do-something like:"Ratanak is an Employee."). Write a main() function to generate an array of five executives and an array of five ordinary employees, and then display information about them. In addition, display the information on the executives by calling the member function inherited from the Employee class.