Inheritance

* Inheritance: allows one class to inherit the characteristics of another class
* Virtual functions support polymorphism “one interface, multiple methods”
* Base class (Parent)
* Derived class (Child)
  + Does not inherit private members/functions
* Format for inheritance
  + class derived-class: access base-class{ //body of derived class }
  + access is optional, (public, private, protected)
    - inheriting them as public/private/protected
* Protected data members:
  + Like private data members that can be inherited by a derived class
* Calling constructor/deconstructor of the base class with the derived class
  + Ex: Rectangle(): TwoDShape()
  + Calls the base class constructor as well
  + Order of hierarchy (base to derived)
* Destructors
  + Inverse order of hierarchy, calls its own destructor then base destructor (derived to base)