Ship, CruiseShip, and CargoShip Classes

Design a Ship class that has the following members:

- A member variable for the name of the ship
- A member variable for the year that the ship was built
- A constructor and appropriate accessors and mutators
- A print function that displays the ship's name and the year it was built.

Design a CruiseShip class that is derived from the Ship class. The CruiseShip class should have the following members:

- A member variable for the maximum number of passengers
- A constructor and appropriate accessors and mutators
- A print function that overrides the print function in the base class. The CruiseShip class's print function should display only the ship's name and the maximum number of passengers.

Design a CargoShip class that is derived from the Ship class. The CargoShip class should have the following members:

- A member variable for the cargo capacity in tonnage.
- A constructor and appropriate accessors and mutators.
- A print function that overrides the print function in the base class. The CargoShip class's print function should display only the ship's name and the ship's cargo capacity.

Demonstrate the classes in a program that has a list of Ships. The list elements should be initialized with Ship, CruiseShip, and CargoShip objects. The program should then step through the list, calling each object's print function. Use the Python issinstance() function to determine which object type each element holds.