Update the Ship , CruiseShip , and CargoShip Classes by doing the following: (see ships.txt or sol\_inherit.txt)

1. Ship class:

\*Make both data members private.

\* Provide public *get* functions for each data member

\* p r i n t function should be pure virtual

**b)** CruiseShip class:

\* The overridden p r i n t function should **not** call the base class’s print function. However, it

should display the ship’s name, year and the maximum number of passengers.

**c)** CargoShip class:

\* The overridden p r i n t function should **not** call the base class’s print function. However, it

should display the ship’s name, year and the ship s cargo capacity.

**d)** Demonstrate classes in a program (having main). The program should do following: (Ref: Fig 12.17)

* + Write a function named *printShip* whose only parameter is a Ship pointer.
  + Function *printShip* should use the Ship pointer to invoke the *print* function.
  + In *main()*: declare an object of CruiseShip and CargoShip.
  + From *main(),* call the function *printShip* such that it will polymorphically (i.e. using a pointer of the base class) invoke *print* function of the CruiseShip object.
  + Call the function *printShip* again such that it will polymorphically (i.e. using a pointer of the base class) invoke *print* function of the CargoShip object.