C++ OOPs Test(2nd test) Attempt any 5

Q.1>Create a Class Flight with details mention below and make appropriate constructor:

Data Member: flight\_number, departure\_city, destination\_city, departure\_time, price.

Methods: getFlightDetails(),update\_time().

Q.2>Create a Friend Class Passenger of above mention class, object of Passenger represents a passenger booking a flight.

Data Member: passenger name.

Methods: bookFlight() take a reference of Class Flight and a particular passenger can book a flight.

display()🡪 display all detail of passenger.

Q.3)Create a class named Library to manage a library catalog,

Data Member: book\_id, author\_name, and category.

One static data member : book\_count

Methods: display()

One static member function : total\_books()🡪display total objects been created.

Q.4) Create a Abstract class Player having method play() and pause() as pure virtual function.

Define its related child class where you have to implement this functions . (Music ,Vedio,Game)

Q.5) Write two functions with the same name findMax, one that takes two integers and another that takes two doubles , and returns the maximum of the two.

Q.6) Create a game character system where characters can have various abilities (e.g., Jump, Attack, Defend). Create a base class Ability with a virtual function perform(). Implement different abilities as derived classes and demonstrate how a character can use these abilities through a pointer to the base class. (child class name JumpAbility,AttackAbility,DefendAbility)