**Homework “Object Oriented Programming”**

1. Create two a derived Passenger class GoldPassenger and SilverPassenger with discount type Medium and High appropriate.
2. Create AirplaneRoute with GoldPassenger and SilverPassenger and calculate sum of discount for each Passenger.
3. Make Ticket.Calculate method virtual and create derived Ticket class BestTicket and override logic of method (base price \* 0.9);
4. Create AirplaneRoute with GoldPassenger and SilverPassenger and BestTicket and calculate sum of discount for each Passenger.
5. Create interface ITicket with properties Passenger, Flight and methods Calculate, Summarize. Ticket and BestPurchase implement ITicket.
6. Change type of Tickets to ITicket, create AirplaneRoute with GoldPassenger and SilverPassenger and BestTicket, and calculate sum of discount for each Passenger.
7. Make Passenger abstract class and create two derived class DefaultPassenger with discountType – None, BronzePassenger with discount type – Low.
8. Change type of Tickets to ITicket, create AirplaneRoute with DefaultPassenger, BronzePassenger GoldPassenger and SilverPassenger and BestTicket, and calculate sum of discount for each Passenger.