**Homework “Collections and Generics”**

1. Arrays
   * Create array of five tickets and initialize it values.
   * Create array of array ticket and initialize it different count of the tickets.
2. List
   * Create list of AirplaneRoute with two items and calculate price of two AirplaneRoutes;
   * Add one more AirplaneRoute to list and calculate sum of orders;
   * Remove two AirplaneRoutes from list and calculate sum of orders;
   * Find index of all items from list.
3. Dictionary
   * Create dictionary of Tickets with two items and calculate price of all tickets (key is Passenger, value is list of tickets);
   * Add one more item to dictionary and calculate price of all tickets;
   * Remove two items from list and calculate price of all tickets;
4. Linq
   * Create a list of AirplaneRoute and select name of all Passenger from AirplaneRoutes;
   * Create a list of AirplaneRoute and select name of all Passenger from AirplaneRoutes where DiscountType is High;
   * Create a list of AirplaneRoute and select name of all Passenger from AirplaneRoutes where discountType is Low and order by descending;
   * Create a list of AirplaneRoute, group by Passenger. Name and select From of all Flights;
   * Create a list of AirplaneRoute, select the first or default AirplaneRoute where sum of tickets less than 100;
5. Extension methods
   * Create extension method Calculate discount for AirplaneRoute class which will calculate discount for all tickets;