Design - Part A

1. The following relations are given (primary keys are underlined):

   TOURIST(TouristID, Name, BirthDate, CreditCard, Nation)
   RESORT(ResortCode, CompanyName, Name, City, #Stars)
   AVAILABLE_SERVICES(ResortCode, CompanyName, ServiceName)
   RESERVATION_STAY(TouristID, StayStartDate, ResortCode, CompanyName
   StayEndDate, Amount, #Adults, #Children, DownPayment)

   Write the following queries

   (a) *Mandatory* exercise in algebra (4 points):
   Find the code and the name of the tourists who have only ever reserved stays at resorts equipped with free wi-fi (`ServiceName='free_wifi'`).

   (b) *Mandatory* exercise in SQL language (5 points):
   For each tourist born after 1980 who has made at least 3 reservations for the same resort, find the tourist name and country, the total number of reservations made by the tourist, the total number of adults for which reservations have been made and the corresponding total amount.

   (c) *Optional* exercise in SQL language (5 points):
   Find the resort code and company name of the 4-star resorts which (i) have never received a reservation whose down payment is equal to the amount, and (ii) have received more reservations from Italian tourists than from German ones.