**Data preparation using SQL exercise**

The following data sources are provided **(see the sample data tables in the Tables.pdf file):**

- **Customer demographics** – customer level information

- **Marketing permission** – information about customers’ contact preferences

- **Flight** – transactions relating to Avios collected on flights

- **Collection** – transactions relating to Avios collected

- **Redemption** – transactions relating to Avios redeemed

- **Purchase Avios history** – Full purchase Avios historic transactions

**EXERCISES**

**1. Create a query to clean the customer demographics table and select customer base with the following requirements:**

**NOTE: a single query is required**

o Customer demographics table has duplicate rows, select the whole table without duplicate rows.

o Select customers who reside in US and UK

o Select customers that are not Premium tier (5. PREM)

o Customers under the age of 18

o Only customers with marketing permission (emailable = ‘Y’)

**2. Create a query or several queries to obtain the information requested below for the period between 01/08/17 and 01/08/18.**

**NOTE: only queries are required for rating the exercise, not the result**

o Total number of collection transactions

o Total number of Avios collected

o Total number of redemption bookings

o Total number of Avios redeemed

o Proportion of collection transactions collected on a flight partner out of all collection transactions

o Proportion of collection transactions collected on a flight partner out of all transactions

**3. Create a query or several queries to get a list of customers for each type of customer indicated below.**

**NOTE: only queries are required for rating the exercise, not lists of customers**

