

## SQL: Lab 2

### 1. Inner Joins:

Using Postgres, produce a report containing Employee\_Name and calculated years of service (YOS) as of September 1<sup>st</sup>, 2023. Limit the report to employees where YOS > 30. Order the output alphabetically by Employee\_Name.

- We will define YOS as:

```
floor((TO_DATE('01SEP2023', 'DDMONYYYY') -
TO_DATE("Start_Date", 'DDMONYYYY'))/365.25) as YOS
```

- The jupiter.employee\_addresses table contains the Employee\_Name column.
- The jupiter.employee\_information table contains the Start\_Date column.
- Both jupiter.employee\_addresses and jupiter.employee\_information contain columns named Employee\_ID.

Employee_Name	YOS
A	31
B	39
C	32
D	31

Figure 1. Output Example

What is the value of YOS for **Banchi, Steven**?

### 2. Creating a Summary Report from Two Tables:

The head of the Sales Department wants to know how many of each product was sold since the **beginning of 2010 (determined by Order\_Date)**. The report should include the product ID, the product name, and the total sold for that product (determined by the sum of Quantity). **Order the report by** descending Total Sold, and ascending Product\_Name.

The data that you need can be found in the following tables:

- jupiter.product\_dim contains Product\_ID, Product\_Name
- jupiter.order\_fact contains Product\_ID, Order\_Date, Quantity.
- Notice that Order\_Date is a text column. You will need to convert it to a date column using the TO\_DATE function (shown in the first question).

**Hint:** to extract the Year from a date column, you can use the following:

```
EXTRACT (YEAR FROM XXX)
```

	Product_ID	Product_Name	total_sold
1	230100600016	Expedition Zero,Medium,Right,Charcoal	6
2	230100700011	Hurricane 4	6
3	230100600031	Outback Sleeping Bag, Large,Right, Blue/Black	6
4	240800200035	Shine Black PRO	6
5	240700100001	Armour L	5
6	220101400088	Casual Genuine Polo-Shirt	5

Figure 2-Partial SQL Output

What is the value of *Total Sold* for the **Product Name = 'Smasher Shorts'** on the report?

### 3. Inner Joins - SQLite:

Using SQLite and the **practice database**, create a report that lists the name of the person, and the name of the movie they own. Order the report by ascending Name. For example:

Name	Movie Name
Andrew Smith	The IAA Strikes Back
Andrew Smith	The Godfather
Becky Jackson	Attack of the Clones
Becky Jackson	Return of the Jedi
Christopher Snow	The Last Data Scientist

Figure 3-Output example

What is the value of **Movie Name** in the **first** observation on the report? – Use **Copy** feature on DataGrip to copy-paste the exact value into Moodle.

### 4. Creating a Summary Report from Two Tables – SQLite:

Using SQLite and the **practice database**, provide a report that lists the person name and the count of movies owned by person. Provide the count of movies in descending order.

How many movies does Annis Kahn own?