

Information and Database Management Systems I

(CIS 4301 UF Online)

Fall 2024

Instructor: Alexander Webber

TA: Kyuseo Park

Homework 2

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Instructions: Please provide your answers to the questions of the following pages in Word or handwritten on separate sheets of paper. Mark clearly to which question each answer belongs. Then convert or scan your work into PDF (the latter by using either a scanner or a suitable scanner app on your smartphone). Note that *only the PDF format* is allowed and that your submission must be a *zipped* along with your source code and work for Question 5. In order to enable the graders to fast find the solutions to your questions, it is important that you correctly specify the location of your answer for each question.

Note: All homework assignments are designed for a period of two, three, or even four weeks (see course deadline sheet). This means they cannot be solved in two or three hours but require a considerable amount of time and effort. Therefore, the first recommendation is to start with them as soon as they are posted. The second recommendation is to distribute the work on a homework assignment over the entire available period. The third recommendation is to submit the homework solutions *on time before the deadline*.

Pledge (Must be signed ☒ according to the UF Honor Code):

On my honor, I have neither given nor received unauthorized aid in doing this assignment.

Student signature

¹Each student is obliged to print out this page, fill in the requested information in a handwritten and readable manner, make the handwritten signature, scan this page into PDF, and put this page as the first page of the PDF submission.

1)

A) $\rho_{E1}(\pi_{PatientID, DepartmentID}(PatientTreatments \bowtie Physicians))$

$\rho_{E2}(\pi_{PatientID, DepartmentID}(PatientTreatments \bowtie Nurses))$

$\pi_{FirstName, LastName, DepartmentID}(Patients \bowtie E1 \bowtie E2)$

B) $\rho_{E1}(\pi_{PatientID}(\sigma_{FirstName="PatientA"}(Patients)) \cup \pi_{PatientID}(\sigma_{FirstName="PatientB"}(Patients)))$

$\rho_{E2}(\pi_{PhysicianID, PatientID}(\sigma_{date="Nov 11"}(Appointments)))$

$\rho_{E3}(\pi_{PhysicianID}(E1 \bowtie E2))$

$\pi_{FirstName, LastName}(Physicians \bowtie E3)$

C) $\rho_{E1}(\pi_{PhysicianID}(\sigma_{Name=GeneSurgery}(Departments \bowtie Physicians)))$

$\rho_{E2}(\pi_{PhysicianID}(\sigma_{FirstName="NurseA"}(Nurses \bowtie PatientTreatments \bowtie E1)))$

$\pi_{FirstName, LastName}(E2 \bowtie Physicians)$

D) $\rho_{E1}(\pi_{PatientID}(\sigma_{Physicians.FirstName="PhysicianA"}(Patients \bowtie Physicians \bowtie Appointments)))$

$\rho_{E1}(\pi_{PatientID}(PatientTreatments))$

$\pi_{FirstName, LastName}(E1 - E2)$

E) $\rho_{E1}(\pi_{PatientID, Cost}(PatientTreatments \bowtie Patients \bowtie Treatments))$

$\rho_{E4}(\pi_{PatientID}(\pi_{PatientID}(E1) - \pi_{PatientID}(\sigma_{E2.Cost > E3.Cost}(\rho_{E2}(E1) \times \rho_{E3}(E1))))$

$\pi_{FirstName, LastName, Cost}(E1 \bowtie E4)$

2)

A) $\pi_{Date, Location, Description}(\sigma_{Name="pilotA"}(Accidents \bowtie FlightPilotAssignments \bowtie Pilots))$

B) $\rho_{E1}(CrewMembers \div \pi_{CrewID}(\sigma_{Name="PilotA"}(FlightCrewAssignments \bowtie FlightPilotAssignments \bowtie Pilots)))$

$\pi_{FirstName, LastName}(CrewMembers \bowtie E1)$

C) $\rho_{E1}(\pi_{AircraftID}(Accidents \bowtie Flights))$

$\pi_{ModelName, Manufacturer}(Aircraft - E1)$

D) $\rho_{E1}(\pi_{CrewID}(\sigma_{YearsOfExperience} (CrewMembers)))$

$\rho_{E2}(\pi_{CrewID}(FlightCrewAssignments \bowtie FlightPilotAssignments \bowtie \sigma_{Name="pilotA"}(Pilots)))$

$\pi_{FirstName, LastName}(CrewMembers \bowtie (E1 \cap E2))$

E) $\rho_{E1}(\pi_{FlightID}(\sigma_{Origin="New York" \wedge Destination="London" \wedge Date="December 25"}(Flights)))$

$\pi_{FirstName, LastName}(E1 \bowtie Tickets \bowtie Passengers)$

3)

A) $\sigma_{F1 \wedge F2 \wedge F3 \wedge F4}(R)$

This expression runs in $O(r)$, evaluating each tuple in R only once. It is optimal as each tuple in a select operation needs to be read, evaluated, and possibly written at least once, and this query evaluate each of the 4 filter functions on the same tuple without needs to iterate through the data more than once.

B) $L1 \subseteq L2 \subseteq L3$

This condition ensures that subsequent project operations do not attempt to store previously eliminated attributes. The expression could be optimized by eliminating the L2 and L3 projections, as either way, we still will only end up with the L1 projection.

C) Possibly but not always. In order for $\sigma_F(\pi_A)$ to be equivalent to $\pi_F(\sigma_A)$, all of the attributes that are being used in F must be present in A. This is not the case for $\pi_F(\sigma_A)$.

D) This is not a valid operation. For difference operations, R1 and R2 must be schema compliant.

4)

A) Minimum 0, occurs where no tuples are similar between R and T (R intersect T yields null set). Maximum is the smaller of r and t ($\min(r, t)$), occurs when one (or both) of r or t is a subset of the other.

B) Minimum 0, occurs where no tuples are similar between R and T (R intersect T yields null set). Maximum is the smaller of r and t ($\min(r, t)$), occurs when one (or both) of r or t is a subset of the other.

C) The minimum is $\max(r, s)$, occurs when one of R or S is a subset of the other. The maximum is $r + s$, occurs when R and S are disjoint (R union S yields null set).

D) Minimum 0, occurs where no tuples are similar between R and T (R intersect T yields null set). Maximum r, occurs when all tuples in R have a match in T.

5)

Task 1

The screenshot shows a SQL Worksheet window with the following tabs: CreateTable.sql, ToyCarOrders Insert Commands.sql, and Drop. The main area displays the SQL command to create the TOYCARORDERS table. The command is as follows:

```
CREATE TABLE ToyCarOrders (  
    OrderNumber INT NOT NULL,  
    QuantityOrdered INT NOT NULL,  
    PriceEach FLOAT NOT NULL,  
    OrderLineNumber INT NOT NULL,  
    Sales DOUBLE PRECISION,  
    OrderDate DATE NOT NULL,  
    DaysSinceLastOrder INT,  
    ProductLine VARCHAR2(20),  
    CustomerName VARCHAR2(40) NOT NULL,  
    AddressLine1 VARCHAR2(50) NOT NULL,  
    City VARCHAR2(20) NOT NULL,  
    PostalCode VARCHAR2(15) NOT NULL,  
    Country VARCHAR2(15) NOT NULL,  
    ContactLastName VARCHAR2(20),  
    ContactFirstName VARCHAR2(15),  
    DealSize VARCHAR2(10),  
    PRIMARY KEY (OrderNumber, OrderLineNumber)  
);
```

Below the main area, the Script Output window shows the message: "Task completed in 0.119 seconds".

Table TOYCARORDERS created.

The screenshot shows a SQL Worksheet window with the following tabs: CreateTable.sql, ToyCarOrders Insert Commands.sql, Drop.sql, SelectAll.sql, 4_c.sql, 4_d.sql, 4_e.sql, 4_f.sql, 4_g.sql, 4_h.sql, 4_i.sql, 4_j.sql, and Welcome Page. The main area displays the SQL command to select all data from the TOYCARORDERS table:

```
SELECT *  
FROM TOYCARORDERS
```

Below the main area, the Query Result window shows the message: "All Rows Fetched: 0 in 0.09 seconds". The result is displayed as a table with the following columns:

ORDERNU...	QUANTIT...	PRICEEACH	ORDERLI...	SALES	ORDERDATE	DAYSSIN...	PRODUCT...	CUSTOME...	ADDRESS...	CITY	POSTALC...	COUNTRY	CONTACT...	CONTACT...	DEALSIZE
------------	------------	-----------	------------	-------	-----------	------------	------------	------------	------------	------	------------	---------	------------	------------	----------

Task 3

I utilized a python script to transform the data as specified. Code is shown here:

```
from operator import itemgetter

USECOLS = [0, 1, 2, 3, 4, 5, 6, 8, 11, 13, -6, -5, -4, -3, -2, -1]

with open("UF\CIS4301\m4\ToyCarOrdersAndSales Insert Commands.sql", "w") as write_file:
    # Ignore '&'
    write_file.write("SET DEFINE OFF\n")
    with open("UF\CIS4301\m4\Auto Sales data.csv", "r") as read_file:
        for line in read_file.readlines()[1:]:
            # Split data, remove random "'s, escape single '
            data = line.replace("'", "").replace('"', "").strip().split(",")
            # Check if address got split
            if len(data) > 20:
                data[13] = ",".join(data[13 : 13 + len(data) - 19])
            # Get needed columns, swap to list to allow edit to date column
            data = list(itemgetter(*USECOLS)(data))
            # Add "TO_DATE" to date data
            data[5] = f"TO_DATE('{data[5]}', 'dd/mm/yyyy')"
            # Add ' to str columns
            for col in range(7, len(data)):
                data[col] = f"'{data[col]}'"
            # Assemble line for file
            line_data = ",".join(data)
            write_str = f"INSERT INTO ToyCarOrders VALUES ({line_data});"
            # Write to file
            write_file.write(write_str + "\n")
```

Starting from the top, I first open the write file, and before anything else, add the command “SET DEFINE OFF”. This command prevents SQL Developer from asking for an input variable whenever a “&” is discovered in a string. Next the read file is opened. Starting from the first line of data, each line is read, any random quotation marks are removed, single quotes are escaped with double single quotes (to prevent the program from thinking the string has ended prematurely), ‘\n’'s are stripped from the end of the line, and finally split into a list by commas. Then the script checks whether the address block had any commas which caused an undesired split, and if this occurred, reconsolidates the address data. Then, the data from non-desired columns is eliminated. After that, the date is converted to the desired SQL format using f-strings and single quotes are added around the remaining string data. Finally, the list of data is recombined with commas, wrapped with the necessary SQL INSERT commands, and written into the desired file.

Task 4

CreateTable.sqlToyCarOrders Insert Commands.sqlDrop.sqlSelectAll.sql4_c.sql4_d.sql4_e.sql4_f.sql4_g.sql4_h.sql4_i.sql4_j.sqlWelcome PageCreateTable.sqlToyCarOrdersToyCarOrdersAndSales Insert Commands.sql

SQL Worksheet: History

WorksheetQuery Builder

SET DEFINE OFF

INSERT INTO ToyCarOrders VALUES (10107, 30, 95.70, 2, 2071, TO_DATE('24/02/2018', 'dd/mm/yyyy'), 825, 'Motorcycles', 'Land of Toys Inc.', '597 Long Airport Avenue', 'NYC', '10022', 'USA', 'Yu', 'Shel', 'Small');
INSERT INTO ToyCarOrders VALUES (10121, 24, 51.35, 5, 2765.9, TO_DATE('07/05/2018', 'dd/mm/yyyy'), 757, 'Motorcycles', 'Reams Collectables', '59 rue de l'Abbaye', 'Reims', '51100', 'France', 'Hensior', 'Paul', 'Small');
INSERT INTO ToyCarOrders VALUES (10134, 41, 94.74, 2, 3884.34, TO_DATE('01/07/2018', 'dd/mm/yyyy'), 703, 'Motorcycles', 'Igon Souveniers', '127 rue du Colonel Pierre Avia', 'Paris', '75501', 'France', 'De Cunha', 'Daniel', 'Medium');
INSERT INTO ToyCarOrders VALUES (10145, 45, 83.26, 6, 3746.7, TO_DATE('25/08/2018', 'dd/mm/yyyy'), 649, 'Motorcycles', 'Toys4GrownUps.com', '78934 Hillside Dr.', 'Pasadena', '90003', 'USA', 'Young', 'Julie', 'Medium');
INSERT INTO ToyCarOrders VALUES (10168, 36, 96.46, 1, 3479.76, TO_DATE('28/10/2018', 'dd/mm/yyyy'), 856, 'Motorcycles', 'Technica Stores Inc.', '9408 Purrh Circle', 'Burlingame', '94017', 'USA', 'Hizano', 'Juri', 'Medium');
INSERT INTO ToyCarOrders VALUES (10180, 29, 86.13, 9, 2497.77, TO_DATE('11/11/2018', 'dd/mm/yyyy'), 573, 'Motorcycles', 'Deedalus Designs Imports', '154, chaussee de Tournai', 'Lille', '59000', 'France', 'Rance', 'Martine', 'Small');
INSERT INTO ToyCarOrders VALUES (10189, 45, 114.84, 1, 5512.32, TO_DATE('18/11/2018', 'dd/mm/yyyy'), 567, 'Motorcycles', 'Berku Gifts', 'Draamen 121, PR 744 Sentrum', 'Bergen', 'H 5004', 'Norway', 'Oestan', 'Seyael', 'Medium');
INSERT INTO ToyCarOrders VALUES (10211, 41, 114.84, 14, 4701.44, TO_DATE('15/01/2019', 'dd/mm/yyyy'), 510, 'Motorcycles', 'Auto Canal Petit', '125, rue Lauriston', 'Paris', '75016', 'France', 'Perrier', 'Dominique', 'Medium');
INSERT INTO ToyCarOrders VALUES (10233, 37, 107.16, 1, 3945.46, TO_DATE('20/02/2019', 'dd/mm/yyyy'), 475, 'Motorcycles', 'Australian Collectors', '103 9520 4555, 636 St Klida Road', 'Melbourne', '3004', 'Australia', 'Ferguson', 'Peter', 'Medium');
INSERT INTO ToyCarOrders VALUES (10287, 23, 101.44, 7, 2033.15, TO_DATE('08/04/2019', 'dd/mm/yyyy'), 483, 'Motorcycles', 'Vitsachome Inc.', '15078 Kingston Rd.', 'NYC', '10032', 'USA', 'Frick', 'Michael', 'Small');
INSERT INTO ToyCarOrders VALUES (10281, 28, 113.88, 2, 3181.64, TO_DATE('18/05/2019', 'dd/mm/yyyy'), 390, 'Motorcycles', 'Temi Collectables Inc.', '14746 Moas Rd.', 'Hewark', '84018', 'USA', 'Brown', 'William', 'Medium');
INSERT INTO ToyCarOrders VALUES (10263, 34, 108.14, 2, 3474.76, TO_DATE('28/06/2019', 'dd/mm/yyyy'), 350, 'Motorcycles', 'Gift Depot Inc.', '125593 South Bay Ln.', 'Bridgewater', '07562', 'USA', 'King', 'Julie', 'Medium');
INSERT INTO ToyCarOrders VALUES (10278, 45, 92.83, 1, 4177.35, TO_DATE('23/07/2019', 'dd/mm/yyyy'), 324, 'Motorcycles', 'La Rochelle Gifts', '47, rue des Cinqante Orages', 'Nantes', '44000', 'France', 'Labrous', 'Janine', 'Medium');
INSERT INTO ToyCarOrders VALUES (10288, 34, 113.89, 4, 4099.68, TO_DATE('27/08/2019', 'dd/mm/yyyy'), 292, 'Motorcycles', 'Marta's Replicas Co.', '39123 Spinnaker Dr.', 'Cambridge', '51247', 'USA', 'Hernandez', 'Marta', 'Medium');
INSERT INTO ToyCarOrders VALUES (10299, 23, 112.93, 9, 2597.39, TO_DATE('30/09/2019', 'dd/mm/yyyy'), 259, 'Motorcycles', 'Toys of Finland', '90-224 8555, Meakuakatu 45', 'Helsinki', '01240', 'Finland', 'Karttunen', 'Matti', 'Small');
INSERT INTO ToyCarOrders VALUES (10309, 41, 107.16, 5, 4394.35, TO_DATE('15/10/2019', 'dd/mm/yyyy'), 245, 'Motorcycles', 'Beane Mini Imports', 'Eriling Skakkes gate 78', 'Stavren', '4110', 'Norway', 'Bergulfsen', 'Jonas', 'Medium');
INSERT INTO ToyCarOrders VALUES (10315, 46, 94.74, 1, 4350.04, TO_DATE('02/11/2019', 'dd/mm/yyyy'), 220, 'Motorcycles', 'Diecast Classics Inc.', '7556 Rumpston St.', 'Allentown', '70247', 'USA', 'Yu', 'Ryung', 'Medium');
INSERT INTO ToyCarOrders VALUES (10329, 42, 104.67, 1, 4396.14, TO_DATE('15/11/2019', 'dd/mm/yyyy'), 216, 'Motorcycles', 'Land of Toys Inc.', '597 Long Airport Avenue', 'NYC', '10022', 'USA', 'Yu', 'Shel', 'Medium');
INSERT INTO ToyCarOrders VALUES (10341, 41, 188.79, 9, 7737.93, TO_DATE('24/11/2019', 'dd/mm/yyyy'), 218, 'Motorcycles', 'Salzburg Collectables', 'Geiselweg 14', 'Salzburg', '50201', 'Austria', 'Pippa', 'Georg', 'Large');
INSERT INTO ToyCarOrders VALUES (10361, 20, 72.55, 15, 1451, TO_DATE('17/12/2019', 'dd/mm/yyyy'), 184, 'Motorcycles', 'Souveniers And Things Co.', 'Monitor Honey Building, 815 Pacific Hwy', 'Chatewood', '20671', 'Australia', 'Stanley', 'Adrian', 'Small');
INSERT INTO ToyCarOrders VALUES (10375, 21, 84.81, 15, 733.11, TO_DATE('03/02/2020', 'dd/mm/yyyy'), 139, 'Motorcycles', 'La Rochelle Gifts', '47, rue des Cinqante Orages', 'Nantes', '44000', 'France', 'Labrous', 'Janine', 'Small');
INSERT INTO ToyCarOrders VALUES (10388, 42, 76.36, 4, 3207.12, TO_DATE('03/03/2020', 'dd/mm/yyyy'), 111, 'Motorcycles', 'FunDzifIdeas.com', '1785 First Street', 'New Bedford', '50553', 'USA', 'Bentley', 'Violeta', 'Medium');
INSERT INTO ToyCarOrders VALUES (10403, 24, 101.44, 7, 2434.56, TO_DATE('08/04/2020', 'dd/mm/yyyy'), 76, 'Motorcycles', 'UK Collectables', '(171) 555-2022, Berkeley Gardens 12 Brewery', 'Liverpool', 'W2L 6LT', 'UK', 'Devon', 'Elizabeth', 'Small');
INSERT INTO ToyCarOrders VALUES (10417, 46, 113.86, 2, 7514.05, TO_DATE('13/05/2020', 'dd/mm/yyyy'), 48, 'Motorcycles', 'Euros Shopping Channel', 'C/ Moralescaral, 84', 'Madrid', '28024', 'Spain', 'Freyer', 'Diego', 'Large');
INSERT INTO ToyCarOrders VALUES (10433, 26, 207.57, 11, 5404.62, TO_DATE('26/01/2018', 'dd/mm/yyyy'), 578, 'Classic Cars', 'Beane Mini Imports', 'Eriling Skakkes gate 78', 'Stavren', '4110', 'Norway', 'Bergulfsen', 'Jonas', 'Medium');
INSERT INTO ToyCarOrders VALUES (10112, 29, 241.59, 1, 1209.11, TO_DATE('24/03/2018', 'dd/mm/yyyy'), 825, 'Classic Cars', 'Volvo Model Replicas', '0921-12 3555, Berguvavägen 8', 'Luleå', 'S-955 22', 'Sweden', 'Berglund', 'Christina', 'Large');
INSERT INTO ToyCarOrders VALUES (10126, 38, 192.87, 11, 7323.04, TO_DATE('28/05/2018', 'dd/mm/yyyy'), 761, 'Classic Cars', 'Corrida Auto Replicas', '(91) 958 22 82, C/ Araquil, 47', 'Madrid', '28023', 'Spain', 'Sommer', 'Martín', 'Large');
INSERT INTO ToyCarOrders VALUES (10140, 37, 189.39, 11, 7374.1, TO_DATE('24/07/2018', 'dd/mm/yyyy'), 705, 'Classic Cars', 'Technica Stores Inc.', '9408 Purrh Circle', 'Burlingame', '94017', 'USA', 'Hizano', 'Juri', 'Large');
INSERT INTO ToyCarOrders VALUES (10150, 45, 244.30, 5, 10993.5, TO_DATE('19/09/2018', 'dd/mm/yyyy'), 649, 'Classic Cars', 'Dragon Souveniers', '445 221 7555, Brons Sok, Brons Apr. 3/6 Teavilvi', 'Singapore', '75903', 'Singapore', 'Batvidas', 'Erico', 'Medium');
INSERT INTO ToyCarOrders VALUES (10163, 21, 231.44, 1, 4840.24, TO_DATE('20/10/2018', 'dd/mm/yyyy'), 619, 'Classic Cars', 'Classic Legends Inc.', '5905 Rumpston St.', 'NYC', '10022', 'USA', 'Hernandez', 'Marta', 'Medium');
INSERT INTO ToyCarOrders VALUES (10174, 34, 235.75, 4, 8014.02, TO_DATE('06/11/2018', 'dd/mm/yyyy'), 603, 'Classic Cars', 'Australian Gift Network', '41-7-3044-6555, 31 Dunoon St. West End', 'South Brisbane', '4101', 'Australia', 'Calaghan', 'Tony', 'Medium');
INSERT INTO ToyCarOrders VALUES (10183, 23, 231.55, 5, 5372.57, TO_DATE('13/11/2018', 'dd/mm/yyyy'), 597, 'Classic Cars', 'Classic Gift Ideas', '1215554695, 752 First Street', 'Philadelphia', '11270', 'USA', 'Gervantes', 'Francisca', 'Medium');

Script Output x

Task completed in 202.975 seconds

1 row inserted.

1 row inserted.

1 row inserted.

1 row inserted.

1 row inserted.

1 row inserted.

1 row inserted.

1 row inserted.

1 row inserted.

1 row inserted.

Task 5

CreateTable.sqlToyCarOrders Insert Commands.sqlDrop.sqlSelectAll.sql4_c.sql4_d.sql4_e.sql4_f.sql4_g.sql4_h.sql4_i.sql4_j.sqlWelcome PageCreateTable.sqlToyCarOrdersToyCarOrdersAndSales Insert Commands.sqlhead.sql

SQL Worksheet: History

WorksheetQuery Builder

SELECT *
FROM TOYCARORDERS
FETCH FIRST 15 ROWS ONLY;

Query Result x

All Rows Fetched: 15 in 0.08 seconds

ORDERNUMBER	QUANTITYORDERED	PRICEEACH	ORDERLINENUMBER	SALES	ORDERDATE	DAYINSECALESTORDER	PRODUCTLINE	CUSTOMERNAME	ADDRESSLINE1	CITY	POSTALCODE	COUNTRY	CONTACTLASTNAME	CONTACTFIRSTNAME	DEALSIZE
1	10145	37	140.35	9	5192.95	25-AUG-18	699Motorcycles	Toys4GrownUps.com	78934 Hillside Dr.	Pasadena	90003	USA	Young	Julie	Medium
2	10168	27	135.59	4	3660.93	25-OCT-18	636Motorcycles	Technica Stores Inc.	9408 Purrh Circle	Burlingame	94017	USA	Birano	Juri	Medium
3	10180	42	111.6	12	4695.61	11-NOV-18	623Motorcycles	Deedalus Designs Imports	154, chaussee de Tournai	Lille	59000	France	Rance	Martine	Medium
4	10189	39	94.34	4	3660.92	10-NOV-18	617Motorcycles	Berku Gifts	Draamen 121, PR 744 Sentrum	Bergen	H 5004	Norway	Oestan	Vegdel	Medium
5	10210	23	130.83	2	3009.09	12-JAN-19	563Motorcycles	Oeaka Souveniers Co.	Dojima Avenue 4F, 1-6-20 Dojima, Kita-ku	Oeaka	530-0003	Japan	Kentary	Mory	Medium
6	10223	47	115.37	4	5422.39	20-FEB-19	825Motorcycles	Australian Collectors	11320 Douglas Av.	Melbourne	3004	Australia	Ferguson	Peter	Medium
7	10236	22	129.64	1	2852.08	03-APR-19	484Motorcycles	Motor Mini Distributors Inc.	7476 Moss Rd.	Philadelphia	71270	USA	Hernandez	Rosa	Small
8	10291	44	130.83	5	5794.52	15-MAY-19	440Motorcycles	Temi Collectables Inc.	14746 Moss Rd.	Hewark	84019	USA	Brown	William	Medium
9	10243	40	111.6	5	4472.29	20-JUN-19	400Motorcycles	Gift Depot Inc.	125593 South Bay Ln.	Bridgewater	07562	USA	Kling	Julie	Medium
10	10275	22	132.02	4	2904.44	23-JUL-19	376Motorcycles	La Rochelle Gifts	47, rue des Cinqante Orages	Nantes	44000	France	Labrous	Janine	Small
11	10285	47	137.97	9	6484.59	27-AUG-19	342Motorcycles	Marta's Replicas Co.	39123 Spinnaker Dr.	Cambridge	51247	USA	Hernandez	Marta	Medium
12	10296	39	94.34	1	3757.26	27-SEP-19	312Motorcycles	Atelier graphique	54, rue Royale	Nantes	44000	France	Schmitt	Carine	Medium
13	10300	34	110.94	2	4043.94	15-OCT-19	296Motorcycles	Mini Classics	3758 North Pendale Street	White Plains	24047	USA	Frick	Steve	Medium
14	10318	45	123.7	4	5566.5	02-NOV-19	278Motorcycles	Diecast Classics Inc.	7556 Rumpston St.	Allentown	70247	USA	Yu	Ryung	Medium
15	10329	20	165.8	2	3176.15	10-NOV-19	246Motorcycles	Land of Toys Inc.	597 Long Airport Avenue	NYC	10022	USA	Yu	Shel	Medium

SQL Worksheet History

Worksheet Query Builder

```
SELECT COUNT(*)  
FROM TOYCARORDERS;
```

Query Result x

All Rows Fetched: 1 in 0.076 seconds

	COUNT(*)
1	2747