Information systems Assignment

*(6G4Z1103)*

**Part 3- DB Design & ORACLE Implementation**

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2017-2018

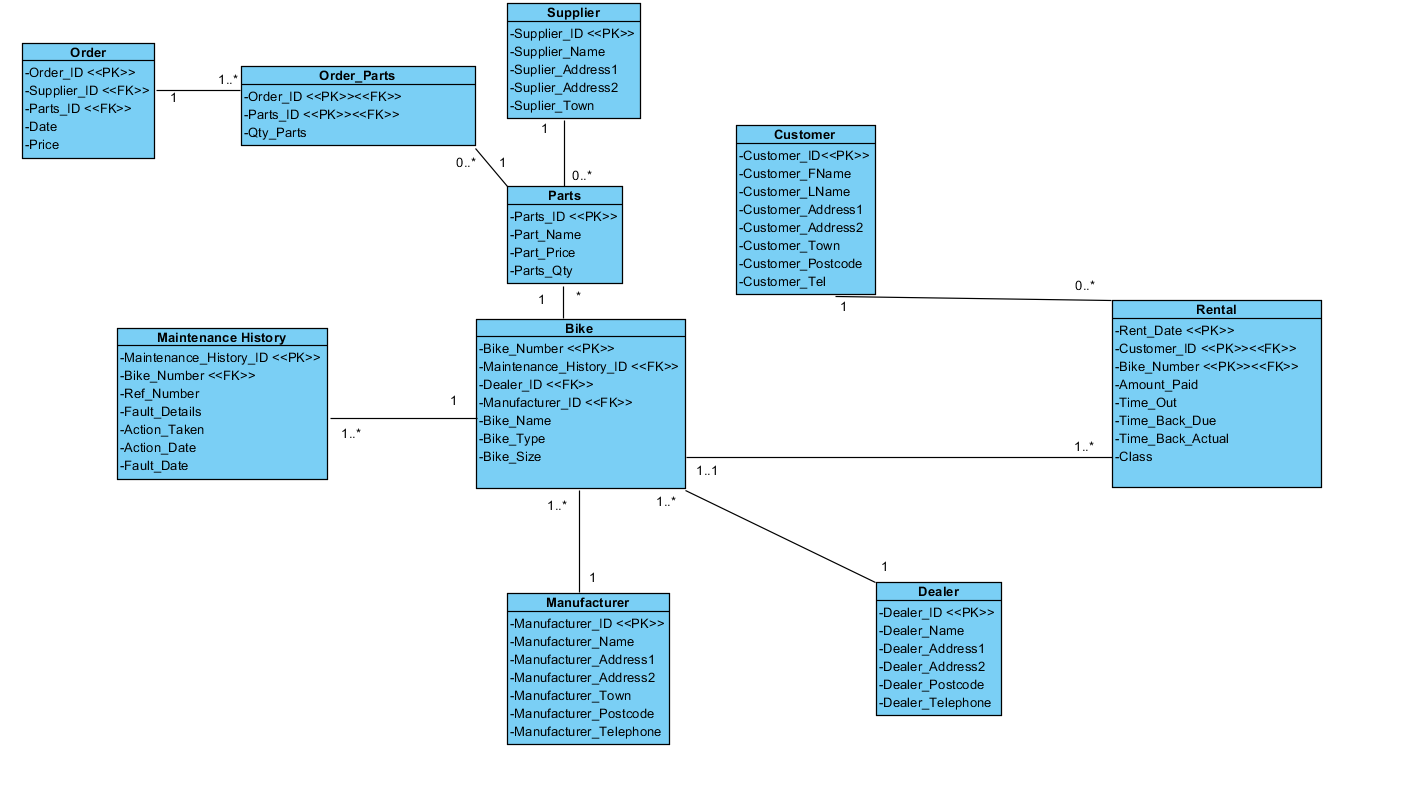
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This report will highlight what we have done in part 3, db design and oracle implementation of the Ray Rentals Assignment. This report will include our amended ERD which we changed based on the feedback we received, our data dictionaries, screenshots of the SQL code for the database tables, insert statements as well as queries. Finally our report will show a paragraph of commentary from each student explaining what we have learnt, evaluating our contribution as well as what we could have done better.

Amended ERD

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Data Dictionaries

**Table : Customer**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Attribute Name** | **Key Type** | **FK Table** | **FK Column** | **Data Type** | **Length** | **Constraint** |
| CUST\_ID | PK |  |  | NUMBER | 9 | UNIQUE, NOT NULL,PRIMARY KEY |
| CUST\_LNAME |  |  |  | VARCHAR2 | 30 | NOT NULL |
| CUST\_FNAME |  |  |  | VARCHAR2 | 30 | NOT NULL |
| CUST\_ADDRESS1 |  |  |  | VARCHAR2 | 30 | NOT NULL |
| CUST\_ADDRESS2 |  |  |  | VARCHAR2 | 30 | NOT NULL |
| CUST\_TOWN |  |  |  | VARCHAR2 | 30 | NOT NULL |
| CUST\_POSTCODE |  |  |  | VARCHAR2 | 8 | NOT NULL |
| CUST\_TELEPHONE |  |  |  | VARCHAR2 | 15 | NOT NULL |

By Lewis Frater

**Table : Rental**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Attribute Name** | **Key Type** | **FK Table** | **FK Column** | **Data Type** | **Length** | **Constraint** |
| RENT\_DATE | PK |  |  | DATE | DD/MM/YY | NOT NULL,PRIMARY KEY |
| CUST\_ID | PK | FK | CUSTOMER | NUMBER | 9 | UNIQUE, NOT NULL,FOREIGN KEY |
| BIKE\_NUMBER | PK | FK | BIKE | NUMBER | 9 | UNIQUE, NOT NULL,FOREIGN KEY |
| AMOUNT\_PAID |  |  |  | NUMBER | 30 | NOT NULL |
| TIME\_OUT |  |  |  | TIME | hh:mm[:ss] | NOT NULL |
| TIME\_DUEBACK |  |  |  | TIME | hh:mm[:ss] | NOT NULL |
| TIME\_BACBACK |  |  |  | TIME | hh:mm[:ss] | NOT NULL |

By Lewis Frater

**Table : Bike**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Attribute Name** | **Key Type** | **FK Table** | **FK Column** | **Data Type** | **Length** | **Constraint** |
| BIKE\_NUMBER | PK |  |  | NUMBER | 9 | UNIQUE,NOT NULL,PRIMARY KEY |
| MAINTENANCE\_HIS | FK | FK | MAINTENANCE\_HISTORY | VARCHAR2 | 30 | CHECK,FOREIGN KEY |
| DEALER\_ID | FK | FK | DEALER | VARCHAR2 | 30 | NOT NULL,FOREIGN KEY |
| MANUFACTURER\_ID | FK | FK | MANUFACTURER | VARCHAR2 | 30 | NOT NULL,FOREIGN KEY |
| BIKE\_NAME |  |  |  | VARCHAR2 | 15 | NOT NULL |
| BIKE\_TYPE |  |  |  | VARCHAR2 | 15 | NOT NULL |
| BIKE\_SIZE |  |  |  | VARCHAR2 | 30 | NOT NULL |

By Rebecca Clarke

**Table : DEALER**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Attribute Name** | **Key Type** | **FK Table** | **FK Column** | **Data Type** | **Length** | **Constraint** |
| DEALER\_ID | PK |  |  | NUMBER | 9 | UNIQUE,NOT NULL,PRIMARY KEY |
| DEALER\_NAME |  |  |  | VARCHAR2 | 30 | NOT NULL |
| DEALER\_ADDRESS1 |  |  |  | VARCHAR2 | 30 | NOT NULL |
| DEALER\_ADDRESS2 |  |  |  | VARCHAR2 | 30 | NOT NULL |
| DEALER\_POSTCODE |  |  |  | VARCHAR2 | 10 | NOT NULL |
| DEALER\_PHONE |  |  |  | VARCHAR2 | 15 | NOT NULL |

By Alexander Harrision

**Table : MANUFACTURER**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Attribute Name** | **Key Type** | **FK Table** | **FK Column** | **Data Type** | **Length** | **Constraint** |
| MANUFACTURER\_ID | PK |  |  | NUMBER | 9 | UNIQUE, NOT NULL, PRIMARY KEY |
| MANUFACTURER\_NAME |  |  |  | VARCHAR2 |  | NOT NULL |
| MANUFACTURER\_ADDRESS1 |  |  |  | VARCHAR2 | 30 | NOT NULL |
| MANUFACTURER\_ADDRESS2 |  |  |  | VARCHAR2 | 30 | NOT NULL |
| MANUFACTURER\_TOWN |  |  |  | VARCHAR2 | 30 | NOT NULL |
| MANUFACTURER\_POSTCODE |  |  |  | VARCHAR2 | 10 | NOT NULL |
| MANUFACTURER\_PHONE |  |  |  | VARCHAR2 | 15 | NOT NULL |

By Callum Flanagan

**Table : Maintenance History**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Attribute Name** | **Key Type** | **FK Table** | **FK Column** | **Data Type** | **Length** | **Constraint** |
| MAINTENANCE\_HISTORY\_ID | PK |  |  | NUMBER | 9 | UNIQUE,NOT NULL,PRIMARY KEY |
| BIKE\_NUMBER | FK | FK | BIKE | VARCHAR2 | 30 | NOT NULL,FOREIGN KEY |
| REF\_NUMBER |  |  |  | VARCHAR2 | 30 | UNIQUE,NOT NULL |
| FAULT\_DETAILS |  |  |  | VARCHAR2 | 400 | CHECK |
| ACTION\_TAKEN |  |  |  | VARCHAR2 | 400 | CHECK |
| ACTION\_DATE |  |  |  | DATE | DD/MM/YY | CHECK |
| FAULT\_DATE |  |  |  | DATE | DD/MM/YY | CHECK |

By Callum Flanagan

**Table : PARTS**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Attribute Name** | **Key Type** | **FK Table** | **FK Column** | **Data Type** | **Length** | **Constraint** |
| PARTS\_ID | PK |  |  | NUMBER | 9 | UNIQUE, NOT NULL,PRIMARY KEY |
| PARTS\_NAME |  |  |  | VARCHAR2 | 30 | NOT NULL |
| PARTS\_PRICE |  |  |  | NUMBER | 10 | NOT NULL |
| PARTS\_QTY |  |  |  | NUMBER | 4 | NOT NULL |

By Alexander Harrision

**Table : ORDER PARTS**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Attribute Name** | **Key Type** | **FK Table** | **FK Column** | **Data Type** | **Length** | **Constraint** |
| ORDER\_ID | PK | FK | ORDER | NUMBER | 9 | UNIQUE, NOT NULL,PRIMARY KEY |
| PARTS\_ID | PK | FK | PARTS | NUMBER | 9 | UNIQUE, NOT NULL,PRIMARY KEY |
| QTY\_PARTS |  |  |  | NUMBER | 4 | NOT NULL |

By Rebecca Clarke

**Table : SUPPLIER**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Attribute Name** | **Key Type** | **FK Table** | **FK Column** | **Data Type** | **Length** | **Constraint** |
| SUPPLIER\_ID | PK |  |  | NUMBER | 9 | UNIQUE, NOT NULL,PRIMARY KEY |
| SUPPLIER\_NAME |  |  |  | VARCHAR2 | 30 | NOT NULL |
| SUPPLIER\_ADDRESS1 |  |  |  | VARCHAR2 | 30 | NOT NULL |
| SUPPLIER\_ADDRESS2 |  |  |  | VARCHAR2 | 15 | NOT NULL |
| SUPPLIER\_TOWN |  |  |  | VARCHAR2 | 15 | NOT NULL |

By Andreas Christofi

**Table : ORDER**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Attribute Name** | **Key Type** | **FK Table** | **FK Column** | **Data Type** | **Length** | **Constraint** |
| ORDER\_ID | PK |  |  | NUMBER | 9 | UNIQUE, NOT NULL,PRIMARY KEY |
| SUPPLIER\_ID | FK | FK | SUPPLIER | NUMBER | 9 | UNIQUE, NOT NULL,FOREIGN KEY |
| PARTS\_ID | FK | FK | PARTS | NUMBER | 9 | UNIQUE, NOT NULL,FOREIGN KEY |
| DATE |  |  |  | DATE | DD/MM/YY | NOT NULL |
| PRICE |  |  |  | NUMBER | 15 | NOT NULL |

By Andreas Christofi

SQL Database Tables (With Insert Statements)

DROP TABLE ORDER\_PARTS;

DROP TABLE RR\_ORDER;

DROP TABLE PARTS;

DROP TABLE SUPPLIER;

DROP TABLE RENTAL;

DROP TABLE BIKE;

DROP TABLE MANUFACTURER;

DROP TABLE MAINTENANCE\_HISTORY;

DROP TABLE DEALER;

DROP TABLE RR\_CUSTOMER;

CREATE TABLE RR\_CUSTOMER

(

RR\_CUSTOMER\_ID NUMBER(9) PRIMARY KEY NOT NULL,

CUST\_LNAME VARCHAR2(30) NOT NULL,

CUST\_FNAME VARCHAR2(30) NOT NULL,

CUST\_ADDRESS1 VARCHAR2(30) NOT NULL,

CUST\_ADDRESS2 VARCHAR2(30) ,

CUST\_TOWN VARCHAR2(30) NOT NULL,

CUST\_POSTCODE VARCHAR2(8) NOT NULL,

CUST\_TELEPHONE VARCHAR2(15) NOT NULL

--By Lewis Frater

);

CREATE TABLE DEALER

(

DEALER\_ID NUMBER(9) PRIMARY KEY NOT NULL,

DEALER\_NAME VARCHAR2(30) NOT NULL,

DEALER\_ADDRESS1 VARCHAR2(30) NOT NULL,

DEALER\_ADDRESS2 VARCHAR2(30) NOT NULL,

DEALER\_TOWN VARCHAR2(30) NOT NULL,

DEALER\_POSTCODE VARCHAR2(10) NOT NULL,

DEALER\_PHONE VARCHAR2(15) NOT NULL

--By Alexander Harrison

);

CREATE TABLE MAINTENANCE\_HISTORY

(

MAINTENANCE\_HISTORY\_ID NUMBER(9) PRIMARY KEY NOT NULL,

BIKE\_NUMBER VARCHAR2(30) NOT NULL,

FAULT\_DETAILS VARCHAR2(400) NOT NULL,

ACTION\_TAKEN VARCHAR2(400) NOT NULL,

ACTION\_DATE DATE NOT NULL,

FAULT\_DATE DATE NOT NULL

);

--BY CALLUM FLANAGAN

CREATE TABLE MANUFACTURER(

MANUFACTURER\_ID NUMBER(9) PRIMARY KEY NOT NULL,

MANUFACTURER\_NAME VARCHAR2(30) NOT NULL,

MANUFACTURER\_ADDRESS1 VARCHAR2(30) NOT NULL,

MANUFACTURER\_ADDRESS2 VARCHAR2(30) NOT NULL,

MANUFACTURER\_TOWN VARCHAR2(30) NOT NULL,

MANUFACTURER\_POSTCODE VARCHAR2(8) NOT NULL,

MANUFACTURER\_PHONE VARCHAR2(15) NOT NULL

);

--BY CALLUM FLANAGAN

CREATE TABLE BIKE

(

BIKE\_NUMBER NUMBER(9) PRIMARY KEY NOT NULL,

MAINTENANCE\_HISTORY\_ID NUMBER(9) NOT NULL,

DEALER\_ID NUMBER(9) NOT NULL,

MANUFACTURER\_ID NUMBER(9) NOT NULL,

BIKE\_NAME VARCHAR2(15) NOT NULL,

BIKE\_TYPE VARCHAR2(15) NOT NULL,

BIKE\_SIZE VARCHAR2(30) NOT NULL,

CONSTRAINT FK\_MAINTENANCE\_HISTORY FOREIGN KEY (MAINTENANCE\_HISTORY\_ID)

REFERENCES MAINTENANCE\_HISTORY(MAINTENANCE\_HISTORY\_ID),

CONSTRAINT FK\_DEALER\_ID FOREIGN KEY (DEALER\_ID)

REFERENCES DEALER(DEALER\_ID),

CONSTRAINT FK\_MANUFACTURER\_ID FOREIGN KEY (MANUFACTURER\_ID)

REFERENCES MANUFACTURER (MANUFACTURER\_ID)

); --BY REBECCA CLARKE

CREATE TABLE RENTAL

(

RENT\_DATE DATE PRIMARY KEY NOT NULL,

RR\_CUSTOMER\_ID NUMBER(9) NOT NULL,

BIKE\_NUMBER NUMBER(9) NOT NULL,

AMOUNT\_PAID NUMBER(30) NOT NULL,

TIME\_OUT NUMBER(9) ,

TIME\_DUEBACK NUMBER(9) ,

TIME\_ACBACK NUMBER(9) ,

CONSTRAINT FK\_CUST\_ID FOREIGN KEY (RR\_CUSTOMER\_ID)

REFERENCES RR\_CUSTOMER(RR\_CUSTOMER\_ID),

CONSTRAINT FK\_BIKE\_NUMBER FOREIGN KEY (BIKE\_NUMBER)

REFERENCES BIKE (BIKE\_NUMBER)

--By Lewis Frater

);

CREATE TABLE SUPPLIER

(

SUPPLIER\_ID NUMBER(9) PRIMARY KEY NOT NULL,

SUPPLIER\_NAME VARCHAR2(30) NOT NULL,

SUPPLIER\_ADDRESS1 VARCHAR2(30) NOT NULL,

SUPPLIER\_ADDRESS2 VARCHAR2(15) NOT NULL,

SUPPLIER\_TOWN VARCHAR2(15) NOT NULL

);

--BY ANDREAS CHRISTOFI

CREATE TABLE PARTS

(

PARTS\_ID NUMBER(9) PRIMARY KEY NOT NULL,

PARTS\_NAME VARCHAR2(30) NOT NULL,

PARTS\_PRICE NUMBER(10) NOT NULL,

PARTS\_QTY NUMBER(4) NOT NULL

--By Alexander Harrison

);

CREATE TABLE RR\_ORDER

(

ORDER\_ID NUMBER(9) PRIMARY KEY NOT NULL,

SUPPLIER\_ID NUMBER(9) NOT NULL,

PARTS\_ID NUMBER(9) NOT NULL,

ORDER\_DATE DATE NOT NULL,

PRICE NUMBER(15) NOT NULL,

CONSTRAINT FK\_PARTS\_ID FOREIGN KEY (PARTS\_ID)

REFERENCES PARTS(PARTS\_ID),

CONSTRAINT FK\_SUPPLIER\_ID FOREIGN KEY (SUPPLIER\_ID)

REFERENCES SUPPLIER (SUPPLIER\_ID)

);

--BY ANDREAS CHRISTOFI

CREATE TABLE ORDER\_PARTS

(

ORDER\_ID NUMBER(9) NOT NULL,

PARTS\_ID NUMBER(9) NOT NULL,

QTY\_PARTS NUMBER(4) NOT NULL,

PRIMARY KEY(ORDER\_ID, PARTS\_ID)

);

--LEWIS FRATER

INSERT INTO RR\_CUSTOMER (RR\_CUSTOMER\_ID, CUST\_LNAME, CUST\_FNAME, CUST\_ADDRESS1,

CUST\_ADDRESS2, CUST\_TOWN, CUST\_POSTCODE, CUST\_TELEPHONE)

VALUES (1, 'Stjohn', 'Donna', '248 Pleasant Hill Road', 'Salford', 'Manchester', 'M13 7FS', 01612053232);

INSERT INTO RR\_CUSTOMER (RR\_CUSTOMER\_ID, CUST\_LNAME, CUST\_FNAME, CUST\_ADDRESS1,

CUST\_ADDRESS2, CUST\_TOWN, CUST\_POSTCODE, CUST\_TELEPHONE)

VALUES (2, 'Gerry', 'Twock', '21 Danger Close', 'Euston', 'London', 'AB1 0AR', 02072043088);

INSERT INTO RR\_CUSTOMER (RR\_CUSTOMER\_ID, CUST\_LNAME, CUST\_FNAME, CUST\_ADDRESS1,

CUST\_ADDRESS2, CUST\_TOWN, CUST\_POSTCODE, CUST\_TELEPHONE)

VALUES (3, 'Ropes', 'Bailey', '12 Mary lane', 'St Helens', 'Liverpool', 'L18 4HQ', 01516673299);

--ALEXANDER HARRISON

INSERT INTO DEALER(DEALER\_ID,DEALER\_NAME,DEALER\_ADDRESS1,DEALER\_ADDRESS2,DEALER\_TOWN,DEALER\_POSTCODE,DEALER\_PHONE)

VALUES(14,'ASH\_UK','Unit 7','Holly Gate Center','Stockport','SK6 G24','07423432432432');

INSERT INTO DEALER(DEALER\_ID,DEALER\_NAME,DEALER\_ADDRESS1,DEALER\_ADDRESS2,DEALER\_TOWN,DEALER\_POSTCODE,DEALER\_PHONE)

VALUES(62,'GB Bikes','Unit 21', 'Gate Center','glossop','SK13 0BG','074345432432');

INSERT INTO DEALER(DEALER\_ID,DEALER\_NAME,DEALER\_ADDRESS1,DEALER\_ADDRESS2,DEALER\_TOWN,DEALER\_POSTCODE,DEALER\_PHONE)

VALUES(92,'Bike ltd','Unit 31','Carfax court','gamesley','SK6 0BG','07454654672');

--CALLUM FLANAGAN

INSERT INTO

Maintenance\_History(MAINTENANCE\_HISTORY\_ID,BIKE\_NUMBER,FAULT\_DETAILS,ACTION\_TAKEN,ACTION\_DATE,FAULT\_DATE)

VALUES(12,'12','Broken chain','New chain put on the bike','10-MAR-17','12-MAR-17');

INSERT INTO

Maintenance\_History(MAINTENANCE\_HISTORY\_ID,BIKE\_NUMBER,FAULT\_DETAILS,ACTION\_TAKEN,ACTION\_DATE,FAULT\_DATE)

VALUES(03,'14','Flat tire','New inner tube put on the bike','17-JUN-17','18-JAN-17');

INSERT INTO

Maintenance\_History(MAINTENANCE\_HISTORY\_ID,BIKE\_NUMBER,FAULT\_DETAILS,ACTION\_TAKEN,ACTION\_DATE,FAULT\_DATE)

VALUES(75,'22','Brakes need bleeding','Brakes have had new brake fluid in them','11-DEC-17','12-AUG-17');

--CALLUM FLANAGAN

INSERT INTO Manufacturer(MANUFACTURER\_ID,MANUFACTURER\_NAME,MANUFACTURER\_ADDRESS1,MANUFACTURER\_ADDRESS2,MANUFACTURER\_TOWN,MANUFACTURER\_POSTCODE,MANUFACTURER\_PHONE)

VALUES(1,'Bike Industry', 'Unit 9', 'Dinting Road', 'Glossop', 'SK13 7DY', '07884556767' );

INSERT INTO Manufacturer(MANUFACTURER\_ID,MANUFACTURER\_NAME,MANUFACTURER\_ADDRESS1,MANUFACTURER\_ADDRESS2,MANUFACTURER\_TOWN,MANUFACTURER\_POSTCODE,MANUFACTURER\_PHONE)

VALUES(34,'Cycles Limited', ' Long Way', 'Station Road', 'Sheffield', 'JX78 9XW', '07788442323' );

INSERT INTO Manufacturer(MANUFACTURER\_ID,MANUFACTURER\_NAME,MANUFACTURER\_ADDRESS1,MANUFACTURER\_ADDRESS2,MANUFACTURER\_TOWN,MANUFACTURER\_POSTCODE,MANUFACTURER\_PHONE)

VALUES(84,'Wheels For You', ' Bridgeway', 'Green Road', 'Birmingham', 'JW45 7KL', '07547896325' );

--BY REBECCA CLARKE

INSERT INTO BIKE(BIKE\_NUMBER,MAINTENANCE\_HISTORY\_ID,DEALER\_ID,MANUFACTURER\_ID,BIKE\_NAME,BIKE\_TYPE,BIKE\_SIZE)

VALUES(1,12, 14,1, 'SlayerX','Road','LargeMale');

INSERT INTO BIKE(BIKE\_NUMBER,MAINTENANCE\_HISTORY\_ID,DEALER\_ID,MANUFACTURER\_ID,BIKE\_NAME,BIKE\_TYPE,BIKE\_SIZE)

VALUES(74,03, 62,34,'Thunder','Tamden','Child');

INSERT INTO BIKE(BIKE\_NUMBER,MAINTENANCE\_HISTORY\_ID,DEALER\_ID,MANUFACTURER\_ID,BIKE\_NAME,BIKE\_TYPE,BIKE\_SIZE)

VALUES(85,75, 92,84, 'LowRiderX','Mountain','StandardMale');

--CALLUM FLANAGAN

INSERT INTO

RENTAL(RENT\_DATE ,RR\_CUSTOMER\_ID, BIKE\_NUMBER,AMOUNT\_PAID,TIME\_OUT,TIME\_DUEBACK,TIME\_ACBACK)

VALUES('21-DEC-17', 1, 1, 40, 1310, 1625, 1800 );

INSERT INTO

RENTAL(RENT\_DATE ,RR\_CUSTOMER\_ID, BIKE\_NUMBER,AMOUNT\_PAID,TIME\_OUT,TIME\_DUEBACK,TIME\_ACBACK)

VALUES('12-MAR-17', 2, 74, 4, 1720, 1835, 1900 );

INSERT INTO

RENTAL(RENT\_DATE, RR\_CUSTOMER\_ID, BIKE\_NUMBER,AMOUNT\_PAID,TIME\_OUT,TIME\_DUEBACK,TIME\_ACBACK)

VALUES('03-AUG-17', 3, 85, 3, 1030, 1345, 1500 );

INSERT INTO ORDER\_PARTS(ORDER\_ID,PARTS\_ID,QTY\_PARTS)

VALUES(1,11,12);

INSERT INTO ORDER\_PARTS(ORDER\_ID,PARTS\_ID,QTY\_PARTS)

VALUES(82,12,30);

INSERT INTO ORDER\_PARTS(ORDER\_ID,PARTS\_ID,QTY\_PARTS)

VALUES(38,55,7);

INSERT INTO PARTS(PARTS\_ID,PARTS\_NAME,PARTS\_PRICE,PARTS\_QTY)

VALUES(11,'Bike crank',82,62);

INSERT INTO PARTS(PARTS\_ID,PARTS\_NAME,PARTS\_PRICE,PARTS\_QTY)

VALUES(12,'Pedal',5,20);

INSERT INTO PARTS(PARTS\_ID,PARTS\_NAME,PARTS\_PRICE,PARTS\_QTY)

VALUES(55,'handlebar',54,2);

--Andreas Christofi

INSERT INTO

SUPPLIER(SUPPLIER\_ID,SUPPLIER\_NAME, SUPPLIER\_ADDRESS1, SUPPLIER\_ADDRESS2, SUPPLIER\_TOWN )

VALUES(45, 'Willys Wheels', '45 Stretford Rd', 'Hulme', 'Manchester');

INSERT INTO

SUPPLIER(SUPPLIER\_ID,SUPPLIER\_NAME, SUPPLIER\_ADDRESS1, SUPPLIER\_ADDRESS2, SUPPLIER\_TOWN )

VALUES(34, 'Bicycle Benjamin', '31 Winstreet Rd', 'Shefwire', 'Sheffield');

INSERT INTO

SUPPLIER(SUPPLIER\_ID,SUPPLIER\_NAME, SUPPLIER\_ADDRESS1, SUPPLIER\_ADDRESS2, SUPPLIER\_TOWN )

VALUES(47, 'Jezza Joes', '11 Meat Rd', 'Hulme', 'Nottingham');

INSERT INTO RR\_ORDER(ORDER\_ID, SUPPLIER\_ID, PARTS\_ID, ORDER\_DATE ,PRICE)

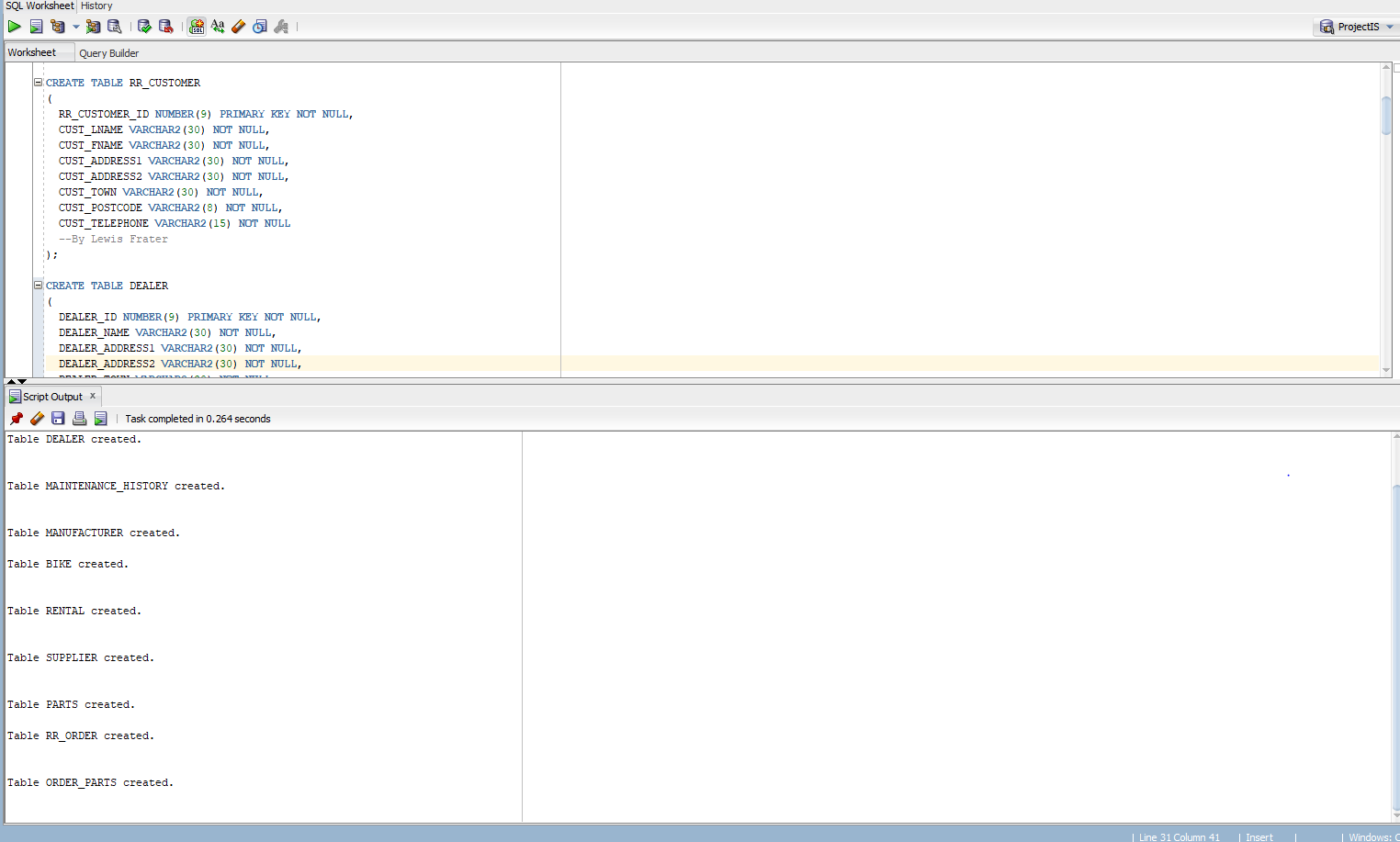
VALUES(433,45,11,'13-Nov-17',300);

INSERT INTO RR\_ORDER(ORDER\_ID, SUPPLIER\_ID, PARTS\_ID, ORDER\_DATE ,PRICE)

VALUES(123,34,12,'17-Oct-17',350);

INSERT INTO RR\_ORDER(ORDER\_ID, SUPPLIER\_ID, PARTS\_ID, ORDER\_DATE ,PRICE)

VALUES(244,47,55,'17-Oct-17', 375);



SQL Querys

--Lewis Frater

--Describes the table RR\_CUSTOMER, for column names, types of data and constraints etc

DESCRIBE RR\_CUSTOMER;

--LEWIS FRATER

SELECT CUST\_FNAME, CUST\_LNAME , CUST\_ADDRESS1 , CUST\_ADDRESS2, CUST\_TOWN,CUST\_POSTCODE

FROM RR\_CUSTOMER;

--LEWIS FRATER

--Order by ascending order

SELECT \* FROM BIKE

ORDER BY BIKE\_NUMBER ASC;

--LEWIS FRATER

--COMPARISON OF PARTS PRICE

SELECT PARTS\_PRICE FROM PARTS

WHERE PARTS\_PRICE >= 50;

--REBECCA

SELECT PARTS\_ID, PARTS\_QTY

FROM PARTS

WHERE PARTS\_QTY > 0;

--REBECCA

-- ALL PARTS IN STOCK

SELECT PARTS\_ID "Parts ID", PARTS\_QTY "Stock"

FROM PARTS

WHERE PARTS\_QTY > 0;

--REBECCA

--All of a bike’s maintenance history

Select \*

FROM MAINTENANCE\_HISTORY

ORDER BY MAINTENANCE\_HISTORY\_ID ASC;

--REBECCA

-- PART PRICE LESS THAN 150

SELECT PARTS\_ID, PARTS\_NAME "PartN", PARTS\_PRICE "Price"

FROM PARTS

WHERE PARTS\_PRICE < 150

ORDER BY PARTS\_ID ASC;

--Group Function

--Andreas Christofi

SELECT Order\_ID

FROM RR\_ORDER

WHERE Order\_ID > 5

GROUP BY ORDER\_ID;

Select RR\_CUSTOMER\_ID, CUST\_FNAME ,CUST\_LNAME, CUST\_TELEPHONE FROM RR\_CUSTOMER;

--Alexander Harrison

Select \* FROM BIKE;

--Alexander Harrison

SELECT\* FROM MANUFACTURER;

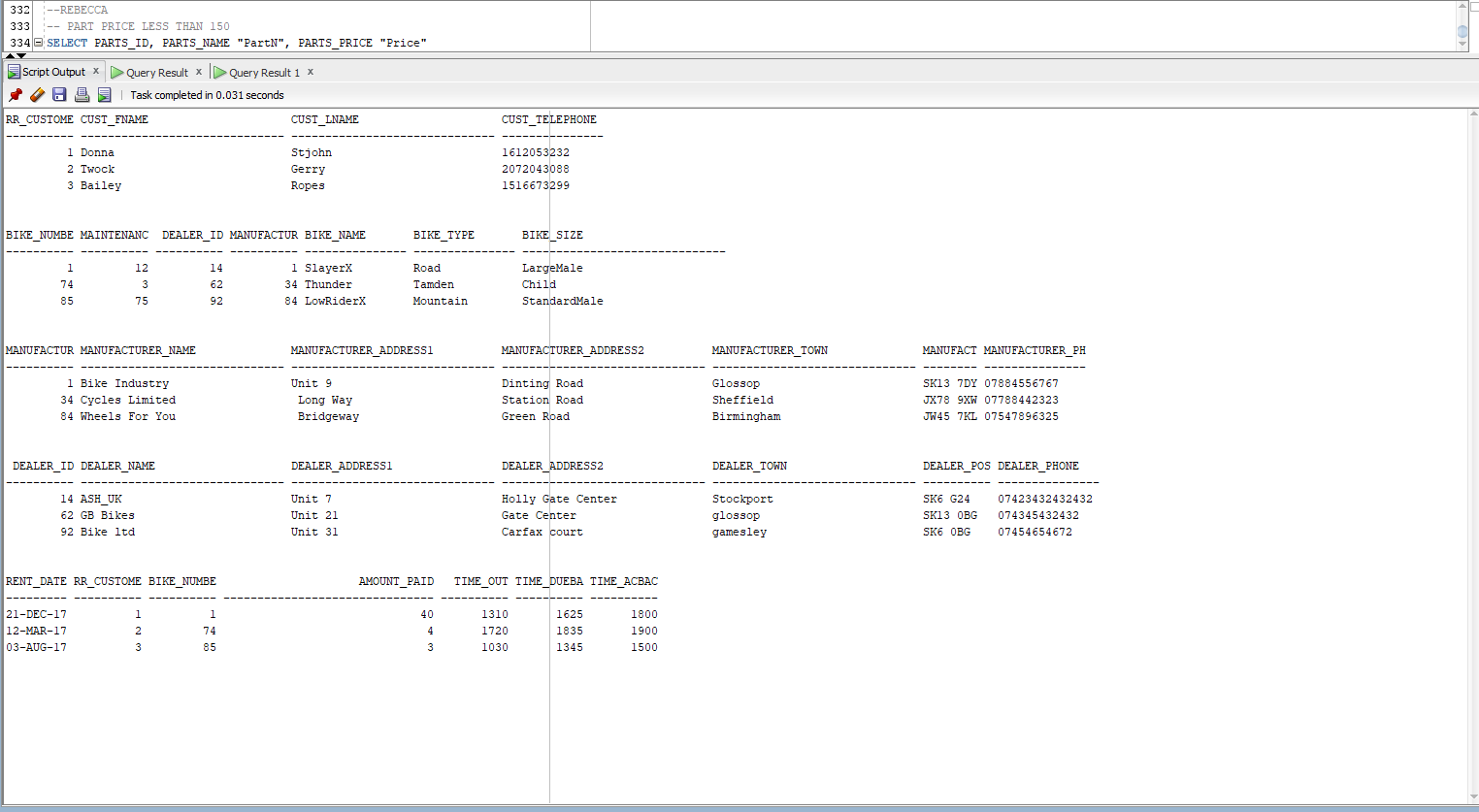
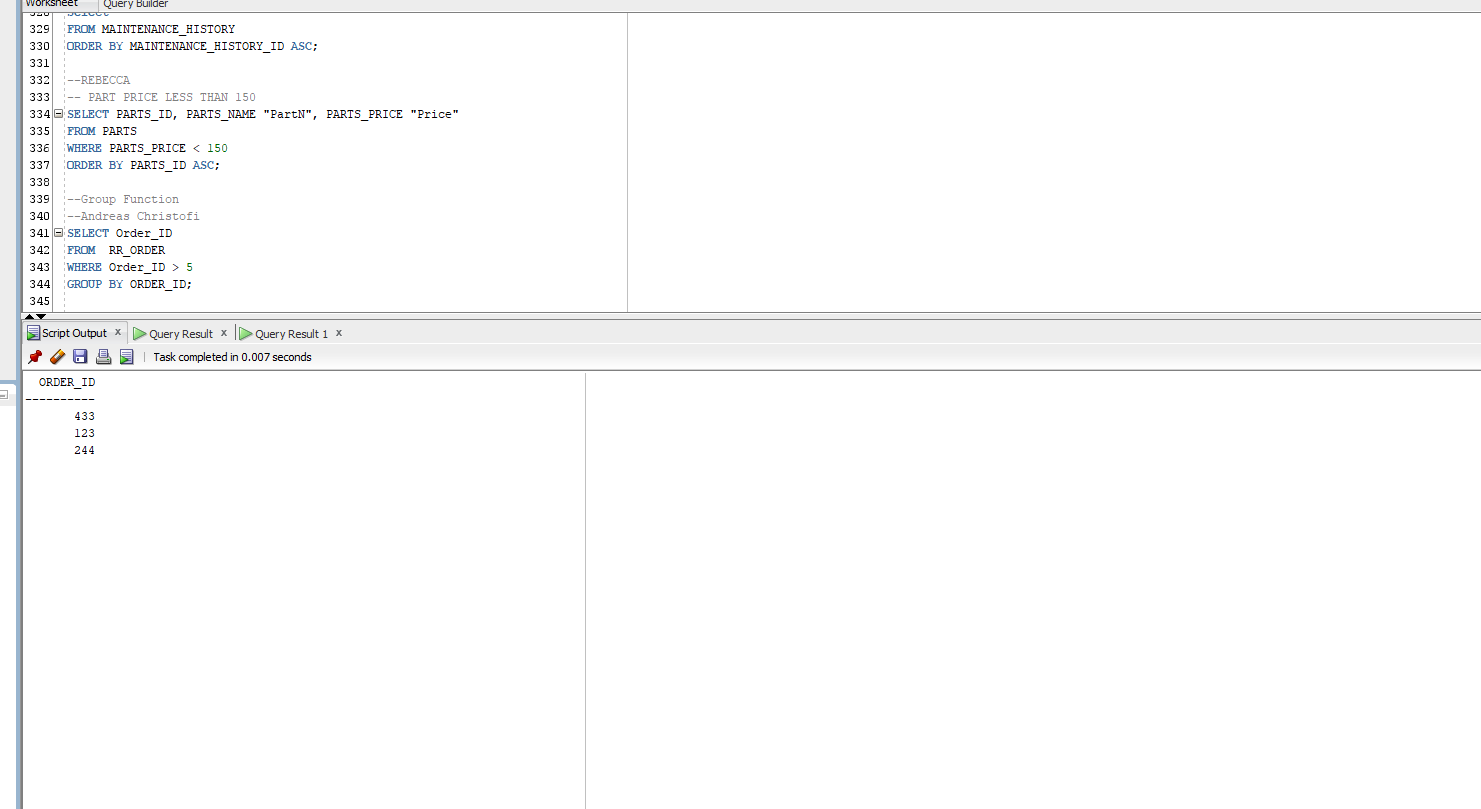
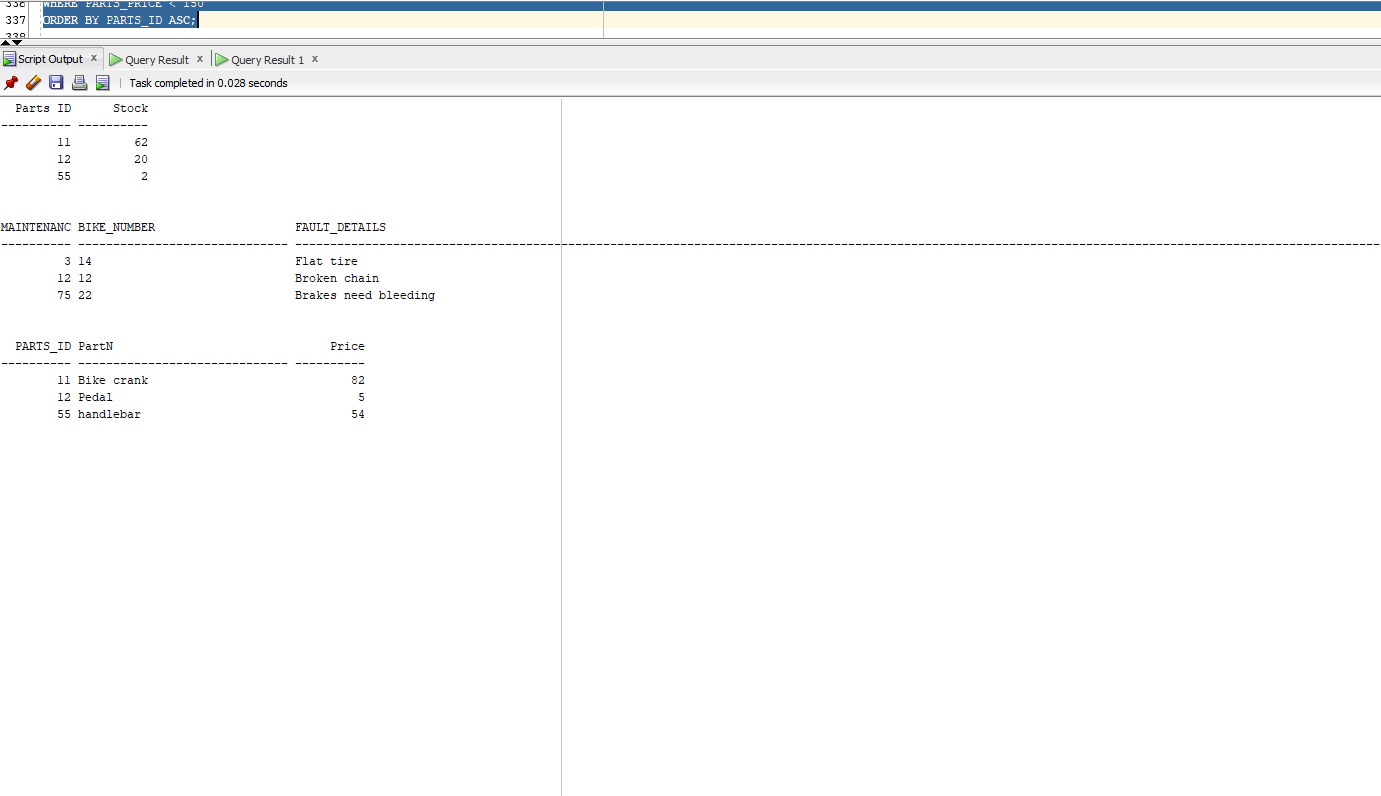
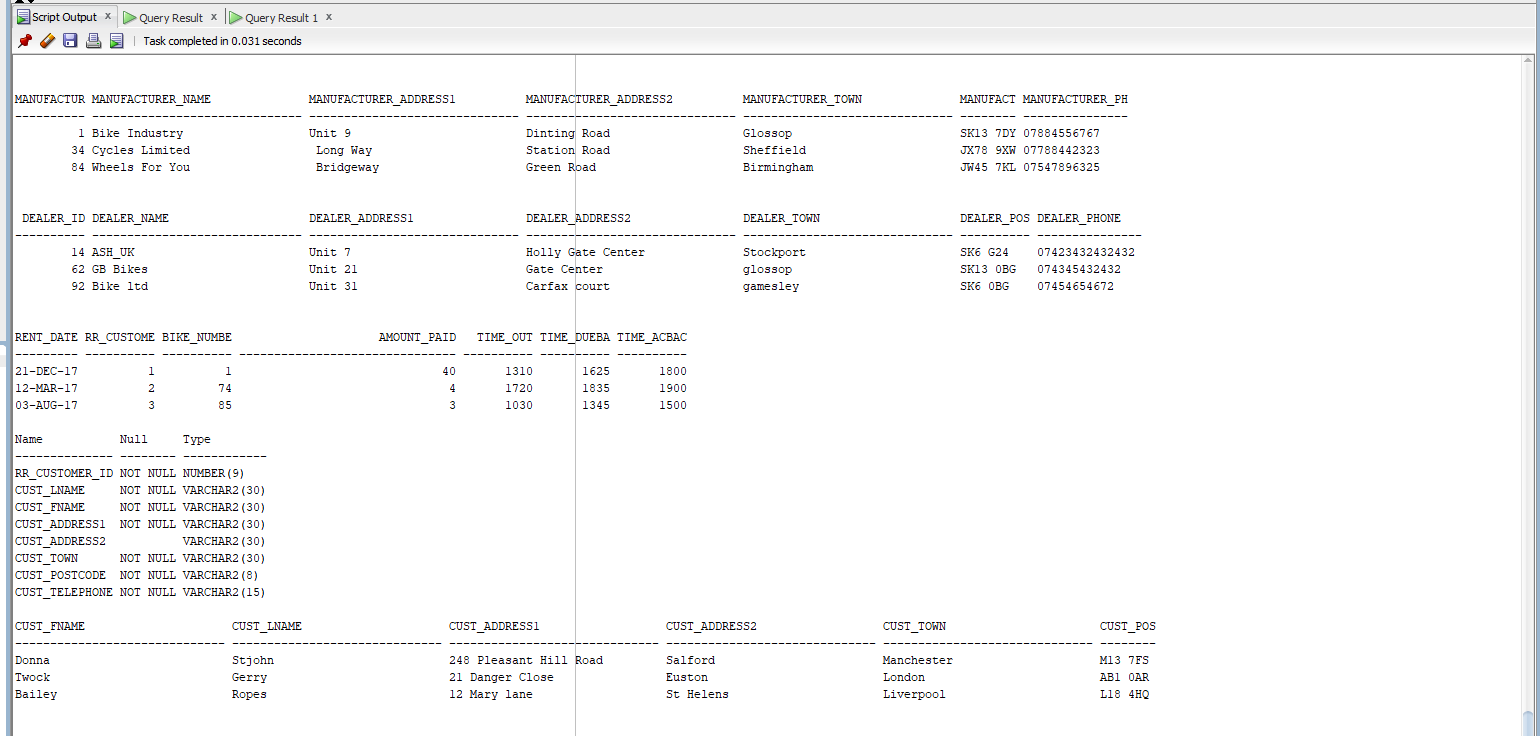
-- CALLUM FLANAGAN

SELECT \* FROM DEALER;

--callum flanagan

SELECT\* FROM RENTAL;

--Alexander Harrison



Commentary

***Lewis Frater - Learning on the go***

Part 3 was interesting because we finally got to implement our ERDs within SQL. Writing the SQL code was quite tricky at first as it was a new language to learn. Putting foreign keys into the tables was a trial and error process as it turned out the order tables are created mattered significantly. This was the initial stumbling block we came across as a group.

***Alexander Harrison***

The data dictionaries were easy to do as I have done them before at college and they are very simple to do. When we were working on the SQL for the database we struggled getting the foreign keys working until we realised that the tables had to be created in a specific order and then the sql code became cleared and made it easy to understand.The queries were easy to do wants you understand how they are worded and they make sense after that. Putting the data into the table was a pain as well getting the order correct and getting it set out. We kept running into issues when we created our database that we had to change the ERD for it to work and make sense. We also had a issue that we did not realise you have to drop all of the tables first and then you can actually create the tables.

***Callum Flanagan***

First of all we could not implement out ERD so we had to fix that first which was easy as we only had to make minor changes. Once we had fixed out ERD then we could move on to completing out data dictionaries. The data dictionaries were straight forward as i have visited them before. Moving on to the SQL for the data bad was hard as we had trouble putting the foreign keys into the tables. We also found that the certain tables had to be made first in order to make a different table.

**Rebecca Clarke**

I found this part of the task, not too bad, we had to fix our ERD after doing the implementation as we found that certain tables had to be changed after we did the SQL code, we also had to figure out a lot of things within SQL such as the correct way to input foreign keys as well as the correct format for time, which we thought was the TIME but turned out to be TIMEDATE. Overall i have learnt about different formats for the type of data, how to implement and fix SQL code, how to communicate effectively within the team to fix the SQL code and ERD, as this is sometimes difficult when trying to clarify what different tables mean and also what is meant by certain elements, for example what is the difference between the manufacturer table and the supplier table.

**Andreas Christofi**

Part 3 was a bit difficult on writing the sql code. We had a lot of errors everytime and we had to check every detail every time till we find how to fix everything. We also had a problem on our table’s names because of the already assigned words sql had, like ‘order’ and others. After we went through everything though, I learned how to get over every obstacle and to work and communicate with my team so to make everything work.

**Piazza**

**[Callum Flanagan](https://piazza.com/class/j7j6p4uwzp76zb?cid=39#)**

[10 days ago](https://piazza.com/class/j7j6p4uwzp76zb?cid=39#)

Date 13/2/2018 Time 12-3

We finished data dictionary's and our ERD. Now we are implementing our database design is Oracle.

Attendance

Lewis, Alexander, Callum and Rebecca

Absent

Andreas

**[Callum Flanagan](https://piazza.com/class/j7j6p4uwzp76zb?cid=39#)**

[4 days ago](https://piazza.com/class/j7j6p4uwzp76zb?cid=39#)

Date 19/2/2018 Time 1-3

We are implementing our database design is Oracle.

Attendance

Lewis, Alexander, Callum and Rebecca, and Andreas

**[Alexander Harrison](https://piazza.com/class/j7j6p4uwzp76zb?cid=39#)**

[2 hours ago](https://piazza.com/class/j7j6p4uwzp76zb?cid=39#)

Date 20/2/2018 Time 1-3

We are implementing our database design is Oracle and trying to get our foreign keys to work

Attendance

Lewis, Alexander, Callum and Rebecca, and Andreas

**[Alexander Harrison](https://piazza.com/class/j7j6p4uwzp76zb?cid=39#)**

[2 hours ago](https://piazza.com/class/j7j6p4uwzp76zb?cid=39#)

Date 21/2/2018 Time 1-3

We finished off our database and started working on queries

Attendance

Lewis, Alexander, Callum and Rebecca, and Andreas

**[Alexander Harrison](https://piazza.com/class/j7j6p4uwzp76zb?cid=39#)**

[Just now](https://piazza.com/class/j7j6p4uwzp76zb?cid=39#)

Date 23/2/2018 Time 12-3

We completed the final bits like inserting information into the table and then finished up the report

Attendance

Lewis, Alexander, Callum and Rebecca, and Andreas