

LAB TASK # 7  
NAME AHMED ALI  
ROLL NO. P19-0042

EXERCISE:

Question 1:

Write a query that displays the first name, last name of all employees who earn more than the average hourly rate. Do not display duplicate rows.

Query:

```
SELECT DISTINCT EMP_FNAME, EMP_LNAME  
FROM EMPLOYEE NATURAL JOIN HOURS  
WHERE HOUR_RATE > (SELECT AVG(HOUR_RATE) FROM HOURS);
```

ANSWER.

```
MariaDB [THEMPARK]> SELECT DISTINCT EMP_FNAME, EMP_LNAME FROM EMPLOYEE NATURAL JOIN HOURS WHERE HOUR_RATE > (SELECT AVG(HOUR_RATE) FROM HOURS);  
+-----+-----+  
| EMP_FNAME | EMP_LNAME |  
+-----+-----+  
| Enrica    | Denver    |  
| Mirrelle  | Namowa    |  
+-----+-----+  
2 rows in set (0.088 sec)
```

Question 2.

Write a query to display an employee's first name, last name and date worked which lists the difference between the number of hours an employee has worked on an attraction and the average hours worked on that attraction. Label this column 'DIFFERENCE' and the average hours column 'AVERAGE'.

Answer:

```
SELECT EMP_FNAME, EMP_LNAME, DATE_WORKED, (SELECT AVG(HOURS_PER_ATTRACT)  
FROM HOURS) AS AVERAGE, HOURS_PER_ATTRACT - (SELECT AVG(HOURS_PER_ATTRACT)  
FROM HOURS) AS DIFFERENCE FROM EMPLOYEE NATURAL JOIN HOURS;
```

```
MariaDB [THEMPARK]> SELECT EMP_FNAME, EMP_LNAME, DATE_WORKED, (SELECT AVG(HOURS_PER_ATTRACT) FROM HOURS) AS AVERAGE, HOURS_PER_ATTRACT -  
-> (SELECT AVG(HOURS_PER_ATTRACT) FROM HOURS) AS DIFFERENCE FROM EMPLOYEE NATURAL JOIN HOURS;  
+-----+-----+-----+-----+-----+  
| EMP_FNAME | EMP_LNAME | DATE_WORKED | AVERAGE | DIFFERENCE |  
+-----+-----+-----+-----+-----+  
| Emma      | Calderdale | 2007-05-18 | 4.9091 | 1.0909 |  
| Emma      | Calderdale | 2007-05-20 | 4.9091 | 1.0909 |  
| Marshal    | Ricardo    | 2007-05-18 | 4.9091 | 1.0909 |  
| Arif       | Arshad     | 2007-05-23 | 4.9091 | -1.9091 |  
| Arif       | Arshad     | 2007-05-21 | 4.9091 | 1.0909 |  
| Arif       | Arshad     | 2007-05-22 | 4.9091 | -1.9091 |  
| Enrica     | Denver     | 2007-05-21 | 4.9091 | 1.0909 |  
| Enrica     | Denver     | 2007-05-22 | 4.9091 | 1.0909 |  
| Mirrelle   | Namowa     | 2007-05-18 | 4.9091 | -1.9091 |  
| Mirrelle   | Namowa     | 2007-05-18 | 4.9091 | -1.9091 |  
| Mirrelle   | Namowa     | 2007-05-19 | 4.9091 | 1.0909 |  
+-----+-----+-----+-----+-----+  
11 rows in set (0.002 sec)
```

Question 3:

Write a query to find the attract capacity, with a attract capacity less than or equal to the average attract capacity.

Answer:

```
SELECT ATTRACT_CAPACITY FROM ATTRACTION WHERE ATTRACT_CAPACITY <=
(SELECT AVG(ATTRACT_CAPACITY) FROM ATTRACTION);
```

```
MariaDB [THEMEPARK]> SELECT ATTRACT_CAPACITY FROM ATTRACTION WHERE ATTRACT_CAPACITY <= (SELECT AVG(ATTRACT_CAPACITY) FROM ATTRACTION);
+-----+
| ATTRACT_CAPACITY |
+-----+
| 34               |
| 62               |
| 24               |
| 30               |
| 40               |
| 34               |
| 42               |
+-----+
7 rows in set (0.071 sec)
```