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**ROLL\_NO : P190053**

**SECTION : BSCS(5A)**

E4.1 Write a query that displays the average hourly rate that has been paid to all employees. Your query should return €7.03.

```
MariaDB [(none)]> use p190053_jawad
Database changed
MariaDB [p190053_jawad]> SELECT AVG(HOUR_RATE)
    -> FROM HOURS;
+-----+
| AVG(HOUR_RATE) |
+-----+
|          7.033636 |
+-----+
1 row in set (0.001 sec)
```

E4.2 Write a query that displays the average attraction age for all attractions where the PARK\_CODE is equal to 'UK3452'. Your query should return 7.25 years.

```

MariaDB [p190053_jawad]> SELECT AVG(ATTRACT_AGE)
-> FROM ATTRACTION WHERE PARK_CODE = "UK3452";
+-----+
| AVG(ATTRACT_AGE) |
+-----+
|          7.2500 |
+-----+
1 row in set (0.012 sec)

```

E4.3 Display the employee numbers of all employees and the total number of hours they have worked. Output format

```

MariaDB [p190053_jawad]> SELECT EMP_NUM, SUM(HOURS_PER_ATTRACT)
-> FROM HOURS GROUP BY EMP_NUM;
+-----+-----+
| EMP_NUM | SUM(HOURS_PER_ATTRACT) |
+-----+-----+
|      100 |                12 |
|      101 |                6 |
|      102 |                12 |
|      104 |                12 |
|      105 |                12 |
+-----+-----+
5 rows in set (0.017 sec)

```

E4.4 Show the attraction number and the minimum and maximum hourly rate for each attraction.

```
MariaDB [p190053_jawad]> SELECT ATTRACT_NO, MIN(HOUR_RATE) , MAX(HOUR_RATE)
-> FROM HOURS
-> GROUP BY ATTRACT_NO;
```

ATTRACT_NO	MIN(HOUR_RATE)	MAX(HOUR_RATE)
10034	6.50	6.50
10078	8.50	8.50
10098	8.50	8.50
30011	7.20	7.20
30012	5.99	7.20
30044	5.99	5.99

6 rows in set (0.023 sec)

E4.5 Using the HOURS table, write a query to display the employee number (EMP\_NUM), the attraction number (ATTRACT\_NO) and the average hours worked per attraction (HOURS\_PER\_ATTRACT) limiting the result to where the average hours worked per attraction is greater or equal to 5. Check your results against those shown in below Figure.

```
MariaDB [p190053_jawad]> SELECT EMP_NUM,ATTRACT_NO, AVG(HOURS_PER_ATTRACT)
-> FROM HOURS
-> GROUP BY EMP_NUM, ATTRACT_NO
-> HAVING AVG(HOURS_PER_ATTRACT)>5;
```

EMP_NUM	ATTRACT_NO	AVG(HOURS_PER_ATTRACT)
100	10034	6.0000
101	10034	6.0000
104	30011	6.0000
104	30012	6.0000

4 rows in set (0.000 sec)

6)

```
|      101 | Ms      | Ricardo | Marshel | 19
50 | 2007-05-19 |
|      102 | Mr      | Arshad  | Arif    | 19
50 | 2007-05-19 |
|      103 | Ms      | Roberts  | Anne    | 19
50 | 2007-05-19 |
|      104 | Mr      | Denver  | Enrica  | 19
50 | 2007-05-19 |
|      105 | Ms      | Namowa  | Mirrelle | 19
50 | 2007-05-19 |
|      106 | Mrs     | Smith   | Gemma   | 19
50 | 2007-05-19 |
+-----+-----+-----+-----+-----+
+-----+
77 rows in set (0.040 sec)
```

7)

```

MariaDB [p190053_jawad]> SELECT EMPLOYEE.EMP_FNAME,EMPLOYEE.LNAME,HOURS.ATTRACT_NO,HOURS.DATE_WORKED
-> FROM EMPLOYEE JOIN HOURS ON EMPLOYEE.EMP_NUM = HOURS.EMP_NUM;
ERROR 1054 (42S22): Unknown column 'EMPLOYEE.LNAME' in 'field list'
MariaDB [p190053_jawad]> SELECT EMPLOYEE.EMP_FNAME,EMPLOYEE.EMP_LNAME,HOURS.ATTRACT_NO,HOURS.DATE_WORKED
-> FROM EMPLOYEE JOIN HOURS ON EMPLOYEE.EMP_NUM = HOURS.EMP_NUM;
+-----+-----+-----+-----+
| EMP_FNAME | EMP_LNAME | ATTRACT_NO | DATE_WORKED |
+-----+-----+-----+-----+
| Emma      | Calderdale | 10034      | 2007-05-18   |
| Emma      | Calderdale | 10034      | 2007-05-20   |
| Marshel    | Ricardo    | 10034      | 2007-05-18   |
| Arif       | Arshad     | 30012      | 2007-05-23   |
| Arif       | Arshad     | 30044      | 2007-05-21   |
| Arif       | Arshad     | 30044      | 2007-05-22   |
| Enrica     | Denver     | 30011      | 2007-05-21   |
| Enrica     | Denver     | 30012      | 2007-05-22   |
| Mirrelle   | Namowa     | 10078      | 2007-05-18   |
| Mirrelle   | Namowa     | 10098      | 2007-05-18   |
| Mirrelle   | Namowa     | 10098      | 2007-05-19   |
+-----+-----+-----+-----+
11 rows in set (0.001 sec)

```

8)

```

MariaDB [p190053_jawad]> SELECT EMP_FNAME,EMP_LNAME,ATTRACT_NO,ATTRACT_NAME
-> FROM EMPLOYEE
-> NATURAL JOIN HOURS
-> NATURAL JOIN ATTRACTION;
+-----+-----+-----+-----+
| EMP_FNAME | EMP_LNAME | ATTRACT_NO | ATTRACT_NAME |
+-----+-----+-----+-----+
| Emma      | Calderdale | 10034      | ThunderCoaster |
| Emma      | Calderdale | 10034      | ThunderCoaster |
| Mirrelle   | Namowa     | 10078      | Ant-Trap      |
| Mirrelle   | Namowa     | 10098      | Carnival       |
| Mirrelle   | Namowa     | 10098      | Carnival       |
+-----+-----+-----+-----+
5 rows in set (0.001 sec)

```

9)

```
MariaDB [p190053_jawad]> SELECT SALE_DATE , LINE_QTY, LINE_PRICE  
-> FROM SALES NATURAL JOIN SALES_LINE  
-> WHERE SALE_DATE = '2007-05-18';
```

SALE_DATE	LINE_QTY	LINE_PRICE
2007-05-18	2	69.98
2007-05-18	1	14.99
2007-05-18	2	69.98
2007-05-18	2	41.98
2007-05-18	1	14.99
2007-05-18	1	14.99
2007-05-18	1	34.99
2007-05-18	4	139.96
2007-05-18	4	168.40
2007-05-18	1	22.50
2007-05-18	2	21.98
2007-05-18	2	84.20
2007-05-18	2	21.98
2007-05-18	2	84.20
2007-05-18	1	22.50
2007-05-18	2	21.98
2007-05-18	2	21.98
2007-05-18	2	84.20
2007-05-18	4	168.40
2007-05-18	1	22.50
2007-05-18	2	21.98
2007-05-18	2	84.20
2007-05-18	2	57.34
2007-05-18	2	37.12
2007-05-18	2	57.34
2007-05-18	2	37.12
2007-05-18	1	18.56
2007-05-18	1	12.12
2007-05-18	4	114.68
2007-05-18	2	57.34
2007-05-18	2	37.12

```
31 rows in set (0.018 sec)
```

```
MariaDB [p190053_jawad]>
```