

---

*Name: Muhammad Abeer*

*Section: 4A*

*Roll No: 19P-0061*

---

# Lab Examples

1.

```
select park_code, ticket_no, ticket_type, ticket_price,  
ticket_price + round((ticket_price * 0.1), 2) price_increase  
from ticket;
```

```
mysql> SELECT PARK_CODE, TICKET_NO, TICKET_TYPE, TICKET_PRICE,  
-> TICKET_PRICE + ROUND((TICKET_PRICE * 0.1), 2) PRICE_INCREASE  
-> FROM TICKET;  
+-----+-----+-----+-----+-----+  
| PARK_CODE | TICKET_NO | TICKET_TYPE | TICKET_PRICE | PRICE_INCREASE |  
+-----+-----+-----+-----+-----+  
| SP4533 | 11001 | Adult | 24.99 | 27.49 |  
| SP4533 | 11002 | Child | 14.99 | 16.49 |  
| SP4533 | 11003 | Senior | 10.99 | 12.09 |  
| FR1001 | 13001 | Child | 18.99 | 20.89 |  
| FR1001 | 13002 | Adult | 34.99 | 38.49 |  
| FR1001 | 13003 | Senior | 20.99 | 23.09 |  
| ZA1342 | 67832 | Child | 18.56 | 20.42 |  
| ZA1342 | 67833 | Adult | 28.67 | 31.54 |  
| ZA1342 | 67855 | Senior | 12.12 | 13.33 |  
| UK3452 | 88567 | Child | 22.50 | 24.75 |  
| UK3452 | 88568 | Adult | 42.10 | 46.31 |  
| UK3452 | 89720 | Senior | 10.99 | 12.09 |  
+-----+-----+-----+-----+-----+  
12 rows in set (0.00 sec)  
  
mysql>
```

2

```
select park_code, ticket_type, ticket_price from ticket where ticket_price > 20;
```

```
+-----+-----+-----+  
| PARK_CODE | TICKET_TYPE | TICKET_PRICE |  
+-----+-----+-----+  
| SP4533 | Adult | 24.99 |  
| FR1001 | Adult | 34.99 |  
| FR1001 | Senior | 20.99 |  
| ZA1342 | Adult | 28.67 |  
| UK3452 | Child | 22.50 |  
| UK3452 | Adult | 42.10 |  
+-----+-----+-----+  
6 rows in set (0.00 sec)
```

3.

select park\_code, ticket\_type, ticket\_price from ticket where ticket\_price < 30;

```
mysql> SELECT PARK_CODE, TICKET_TYPE, TICKET_PRICE from ticket where ticket_price < 30;
+-----+-----+-----+
| PARK_CODE | TICKET_TYPE | TICKET_PRICE |
+-----+-----+-----+
| SP4533    | Adult       | 24.99        |
| SP4533    | Child       | 14.99        |
| SP4533    | Senior      | 10.99        |
| FR1001    | Child       | 18.99        |
| FR1001    | Senior      | 20.99        |
| ZA1342    | Child       | 18.56        |
| ZA1342    | Adult       | 28.67        |
| ZA1342    | Senior      | 12.12        |
| UK3452    | Child       | 22.50        |
| UK3452    | Senior      | 10.99        |
+-----+-----+-----+
10 rows in set (0.00 sec)
```

4.

select park\_code, park\_name, park\_country from themepark where park\_code < "uk2262";

```
mysql> select park_code, park_name, park_country from themepark where park_code < "uk2262";
+-----+-----+-----+
| park_code | park_name    | park_country |
+-----+-----+-----+
| FR1001    | FairyLand    | FR           |
| NL1202    | Efling       | NL           |
| SP4533    | AdventurePort | SP           |
| SW2323    | Labyrinthe   | SW           |
+-----+-----+-----+
4 rows in set (0.00 sec)
```

## 5.

Select emp\_num, attract\_no, hours\_per\_attract, from hours where hours\_per\_attract between 5 and 10

```
mysql> select emp_num, attract_no, hours_per_attract from hours where hours_per_attract between 5 and 10;
+-----+-----+-----+
| emp_num | attract_no | hours_per_attract |
+-----+-----+-----+
| 100 | 10034 | 6 |
| 100 | 10034 | 6 |
| 101 | 10034 | 6 |
| 102 | 30044 | 6 |
| 104 | 30011 | 6 |
| 104 | 30012 | 6 |
| 105 | 10098 | 6 |
+-----+-----+-----+
7 rows in set (0.00 sec)

mysql>
```

## 6.

Select \* from ticket where ticket\_type in ('child', 'senior');

```
mysql> select * from ticket where ticket_type in ('child', 'senior');
+-----+-----+-----+-----+
| TICKET_NO | TICKET_PRICE | TICKET_TYPE | PARK_CODE |
+-----+-----+-----+-----+
| 11002 | 14.99 | Child | SP4533 |
| 11003 | 10.99 | Senior | SP4533 |
| 13001 | 18.99 | Child | FR1001 |
| 13003 | 20.99 | Senior | FR1001 |
| 67832 | 18.56 | Child | ZA1342 |
| 67855 | 12.12 | Senior | ZA1342 |
| 88567 | 22.50 | Child | UK3452 |
| 89720 | 10.99 | Senior | UK3452 |
+-----+-----+-----+-----+
8 rows in set (0.00 sec)

mysql>
```

7.

select emp\_lname, emp\_fname, emp\_num from employee where emp\_fname like 'a%';

```
+-----+-----+-----+
| EMP_LNAME | EMP_FNAME | EMP_NUM |
+-----+-----+-----+
| Arshad    | Arif      | 102     |
| Roberts   | Anne      | 103     |
+-----+-----+-----+
2 rows in set (0.00 sec)
```

8.

Select \* from themepark where park\_name like "%land";

```
mysql> Select * from themepark where park_name like '%Land';
+-----+-----+-----+-----+
| PARK_CODE | PARK_NAME   | PARK_CITY | PARK_COUNTRY |
+-----+-----+-----+-----+
| FR1001    | FairyLand   | PARIS     | FR            |
| UK2622    | MiniLand    | WINDSOR   | UK            |
| UK3452    | PleasureLand | STOKE     | UK            |
+-----+-----+-----+-----+
3 rows in set (0.00 sec)
```

9.

select emp\_num, attract\_no from hours where hours\_per\_attract > 3 and date\_worked > '2007-05-18';

```
mysql> SELECT EMP_NUM, ATTRACT_NO
-> FROM HOURS
-> WHERE HOURS_PER_ATTRACT > 3
-> AND DATE_WORKED > '2007-05-18';
+-----+-----+
| EMP_NUM | ATTRACT_NO |
+-----+-----+
| 100     | 10034      |
| 102     | 30044      |
| 104     | 30011      |
| 104     | 30012      |
| 105     | 10098      |
+-----+-----+
5 rows in set (0.00 sec)
```

## 10.

select \* from attraction where attract\_age <=10 and attract\_capacity < 100 and attract\_name is not null;

```
mysql> select * from attraction where attract_age <=10 and attract_capacity < 100 and attract_name is not null;
```

ATTRACT_NO	ATTRACT_NAME	ATTRACT_AGE	ATTRACT_CAPACITY	PARK_CODE
10056	SpinningTeacups	4	62	FR1001
30012	Pirates	10	42	UK3452
30044	UnderSeaWord	4	80	UK3452
98764	GoldRush	5	80	ZA1342

4 rows in set (0.00 sec)

## 11.

select \* from attraction where (park\_code like "fr%" and attract\_capacity <50) or (attract\_capacity > 100);

ATTRACT_NO	ATTRACT_NAME	ATTRACT_AGE	ATTRACT_CAPACITY	PARK_CODE
10034	ThunderCoaster	11	34	FR1001
10067	FlightToStars	11	24	FR1001
10078	Ant-Trap	23	30	FR1001
10098	Carnival	3	120	FR1001
20056	3D-Lego_Show	3	200	UK3452

5 rows in set (0.00 sec)

This query is showing all the records from the attraction table where an attraction has either both a park code that starts with 'FR' and has a capacity of less than 50 people, or an attraction that has just a capacity of over 100 people.

## 12.

select \* from employee order by emp\_lname, emp\_fname;

```
-----+-----+
| EMP_NUM | EMP_TITLE | EMP_LNAME | EMP_FNAME | EMP_DOB   | EMP_HIRE_DATE | EM
P_AREA_CODE | EMP_PHONE | PARK_CODE |
+-----+-----+-----+-----+-----+-----+-----+
| 102 | Mr | Arshad | Arif | 1969-11-14 | 1990-12-20 | 72
53 | 675-8993 | FR1001 |
| 100 | Ms | Calderdale | Emma | 1972-06-15 | 1992-03-15 | 01
81 | 324-9134 | FR1001 |
| 104 | Mr | Denver | Enrica | 1980-11-08 | 2001-10-20 | 72
53 | 504-4434 | ZA1342 |
| 105 | Ms | Namowa | Mirrelle | 1990-03-14 | 2006-11-08 | 01
81 | 890-3243 | FR1001 |
| 101 | Ms | Ricardo | Marshal | 1978-03-19 | 1996-04-25 | 01
81 | 324-4472 | UK3452 |
| 103 | Ms | Roberts | Anne | 1974-10-16 | 1994-08-16 | 01
81 | 898-3456 | UK3452 |
| 106 | Mrs | Smith | Gemma | 1968-02-12 | 1989-01-05 | 01
81 | 324-7845 | ZA1342 |
+-----+-----+-----+-----+-----+-----+-----+
7 rows in set (0.00 sec)

mysql>
```

## 13.

select ticket\_type, park\_code from ticket where (ticket\_price > 15 and ticket\_type like 'child')  
order by ticket\_no desc;

```
mysql> select ticket_type, park_code from ticket where (ticket_price > 15 and ti
cket_type like 'child') order by ticket_no desc;
+-----+-----+
| ticket_type | park_code |
+-----+-----+
| Child | UK3452 |
| Child | ZA1342 |
| Child | FR1001 |
+-----+-----+
3 rows in set (0.00 sec)
```

This query displays the ticket price greater than 15 for the ticket type of "CHILD" in descending order.

## 14.

```
select distinct(park_code) from attraction;
```

```
mysql> select distinct(park_code) from attraction;
+-----+
| park_code |
+-----+
| FR1001    |
| UK3452    |
| ZA1342    |
+-----+
3 rows in set (0.00 sec)
```



# LAB TASK

1.

select park\_code,park\_name, park\_city, park\_country from themepark where  
park\_country!='UK';

```
mysql> select park_code,park_name, park_city, park_country from themepark where  
-> park_country!='UK';
```

park_code	park_name	park_city	park_country
FR1001	FairyLand	PARIS	FR
NL1202	Efling	NOORD	NL
SP4533	AdventurePort	BARCELONA	SP
SW2323	Labyrinthe	LAUSANNE	SW
ZA1342	GoldTown	JOHANNESBURG	ZA

```
5 rows in set (0.00 sec)  
  
mysql>
```

2.

select transaction\_no,park\_code,sale\_date from sales where sale\_date = '2007-05-18';

```
mysql>  
mysql> select transaction_no, park_code, sale_date from sales where sale_date =  
'2007-05-18';
```

transaction_no	park_code	sale_date
12781	FR1001	2007-05-18
12782	FR1001	2007-05-18
12783	FR1001	2007-05-18
12784	FR1001	2007-05-18
12785	FR1001	2007-05-18
12786	FR1001	2007-05-18
34534	UK3452	2007-05-18
34535	UK3452	2007-05-18
34536	UK3452	2007-05-18
34537	UK3452	2007-05-18
34538	UK3452	2007-05-18
34539	UK3452	2007-05-18
34540	UK3452	2007-05-18
34541	UK3452	2007-05-18
67589	ZA1342	2007-05-18
67590	ZA1342	2007-05-18
67591	ZA1342	2007-05-18
67592	ZA1342	2007-05-18

3.

select ticket\_no, ticket\_price, ticket\_type, park\_code from ticket where ticket\_price between 20 and 30;

```
mysql> select ticket_no, ticket_price, ticket_type, park_code from ticket where
ticket_price between 20 and 30;
+-----+-----+-----+-----+
| ticket_no | ticket_price | ticket_type | park_code |
+-----+-----+-----+-----+
| 11001 | 24.99 | Adult | SP4533 |
| 13003 | 20.99 | Senior | FR1001 |
| 67833 | 28.67 | Adult | ZA1342 |
| 88567 | 22.50 | Child | UK3452 |
+-----+-----+-----+-----+
4 rows in set (0.00 sec)

mysql>
```

4.

mysql> select attract\_no, attract\_name , attract\_age, attract\_capacity, park\_code from attraction where attract\_capacity > 60 and park\_code = 'fr1001';

```
mysql> select attract_no, attract_name , attract_age, attract_capacity, park_code
from attraction where attract_capacity > 60 and park_code= 'fr1001';
+-----+-----+-----+-----+-----+
| attract_no | attract_name | attract_age | attract_capacity | park_code |
+-----+-----+-----+-----+-----+
| 10056 | SpinningTeacups | 4 | 62 | FR1001 |
| 10098 | Carnival | 3 | 120 | FR1001 |
+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)

mysql>
```

5.

select attract\_no, hour\_rate, round(hour\_rate\*1.2,2) as increased\_rate  
from hours;

```
mysql> select attract_no, hour_rate, round(hour_rate*1.2,2) as increased_rate fr
om hours;
+-----+-----+-----+
| attract_no | hour_rate | increased_rate |
+-----+-----+-----+
|      10034 |      6.50 |          7.80 |
|      10034 |      6.50 |          7.80 |
|      10034 |      6.50 |          7.80 |
|      30012 |      5.99 |          7.19 |
|      30044 |      5.99 |          7.19 |
|      30044 |      5.99 |          7.19 |
|      30011 |      7.20 |          8.64 |
|      30012 |      7.20 |          8.64 |
|      10078 |      8.50 |         10.20 |
|      10098 |      8.50 |         10.20 |
|      10098 |      8.50 |         10.20 |
+-----+-----+-----+
11 rows in set (0.00 sec)
```

6.

The between operator is used to find the range of data between two values while the IN operator is used to find only specified values.

7.

select distinct(emp\_num) from hours;

```
mysql> select distinct(emp_num) from hours;
+-----+
| emp_num |
+-----+
|      100 |
|      101 |
|      102 |
|      104 |
|      105 |
+-----+
5 rows in set (0.03 sec)

mysql>
```

8.

select \* from sales order by sale\_date desc;

```
mysql> select* from sales order by sale_date desc;
+-----+-----+-----+
| TRANSACTION_NO | PARK_CODE | SALE_DATE |
+-----+-----+-----+
| 12781 | FR1001 | 2007-05-18 |
| 12782 | FR1001 | 2007-05-18 |
| 12783 | FR1001 | 2007-05-18 |
| 12784 | FR1001 | 2007-05-18 |
| 12785 | FR1001 | 2007-05-18 |
| 12786 | FR1001 | 2007-05-18 |
| 34534 | UK3452 | 2007-05-18 |
| 34535 | UK3452 | 2007-05-18 |
| 34536 | UK3452 | 2007-05-18 |
| 34537 | UK3452 | 2007-05-18 |
| 34538 | UK3452 | 2007-05-18 |
| 34539 | UK3452 | 2007-05-18 |
| 34540 | UK3452 | 2007-05-18 |
| 34541 | UK3452 | 2007-05-18 |
| 67589 | ZA1342 | 2007-05-18 |
| 67590 | ZA1342 | 2007-05-18 |
| 67591 | ZA1342 | 2007-05-18 |
| 67592 | ZA1342 | 2007-05-18 |
| 67593 | ZA1342 | 2007-05-18 |
+-----+-----+-----+
19 rows in set (0.00 sec)
```

9.

select transaction\_no, line\_price from sales\_line where line\_price > 50;

```
mysql> select transaction_no, line_price from sales_line where line_price >50;
+-----+-----+
| transaction_no | line_price |
+-----+-----+
|          12781 |        69.98 |
|          12782 |        69.98 |
|          12785 |       139.96 |
|          34534 |       168.40 |
|          34535 |        84.20 |
|          34537 |        84.20 |
|          34539 |        84.20 |
|          34540 |       168.40 |
|          34541 |        84.20 |
|          67589 |        57.34 |
|          67590 |        57.34 |
|          67592 |       114.68 |
|          67593 |        57.34 |
+-----+-----+
13 rows in set (0.00 sec)

mysql>
```

10.

select emp\_num, emp\_fname from employee order by emp\_num desc limit 2;

```
mysql> SELECT EMP_NUM, EMP_FNAME FROM EMPLOYEE ORDER BY EMP_NUM DESC LIMIT 2;
+-----+-----+
| EMP_NUM | EMP_FNAME |
+-----+-----+
|      106 | Gemma     |
|      105 | Mirrelle  |
+-----+-----+
2 rows in set (0.00 sec)

mysql>
```