

NAME :: IBRAR BABAR

ROLL no. 19P-0104

BS(CS)

Section - 4A

```
CREATE TABLE THEMEPARK (  
PARK_CODE VARCHAR(10) NOT NULL PRIMARY KEY,  
PARK_NAME VARCHAR(35) NOT NULL,  
PARK_CITY VARCHAR(50) NOT NULL,  
PARK_COUNTRY CHAR(2) NOT NULL);
```

```
mysql> describe themepark;
```

Field	Type	Null	Key	Default	Extra
PARK_CODE	varchar(10)	NO	PRI	NULL	
PARK_NAME	varchar(35)	NO		NULL	
PARK_CITY	varchar(50)	NO		NULL	
PARK_COUNTRY	char(2)	NO		NULL	

4 rows in set (0.06 sec)

```
CREATE TABLE EMPLOYEE (  
EMP_NUM NUMERIC(4) PRIMARY KEY,  
EMP_TITLE VARCHAR(4),  
EMP_LNAME VARCHAR(15) NOT NULL,  
EMP_FNAME VARCHAR(15) NOT NULL,  
EMP_DOB DATE NOT NULL,  
EMP_HIRE_DATE DATE,  
EMP_AREA_CODE VARCHAR(4) NOT NULL,  
EMP_PHONE VARCHAR(12) NOT NULL,  
PARK_CODE VARCHAR(10),  
INDEX (PARK_CODE),
```

CONSTRAINT FK_EMP_PARK FOREIGN KEY(PARK_CODE) REFERENCES THEMEPARK(PARK_CODE));

```
mysql> describe employee;
```

Field	Type	Null	Key	Default	Extra
EMP_NUM	decimal(4,0)	NO	PRI	NULL	
EMP_TITLE	varchar(4)	YES		NULL	
EMP_LNAME	varchar(15)	NO	MUL	NULL	
EMP_FNAME	varchar(15)	NO		NULL	
EMP_DOB	date	NO		NULL	
EMP_HIRE_DATE	date	YES		NULL	
EMP_AREA_CODE	varchar(4)	NO		NULL	
EMP_PHONE	varchar(12)	NO		NULL	
PARK_CODE	varchar(10)	YES	MUL	NULL	

9 rows in set (0.00 sec)

CREATE TABLE TICKET (

TICKET_NO NUMERIC(10) PRIMARY KEY,

TICKET_PRICE NUMERIC(4,2) DEFAULT 00.00 NOT NULL,

TICKET_TYPE VARCHAR(10),

PARK_CODE VARCHAR(10),

INDEX (PARK_CODE),

CONSTRAINT FK_TICKET_PARK FOREIGN KEY(PARK_CODE) REFERENCES THEMEPARK(PARK_CODE));

```
mysql>
mysql> describe ticket;
```

Field	Type	Null	Key	Default	Extra
TICKET_NO	decimal(10,0)	NO	PRI	NULL	
TICKET_PRICE	decimal(4,2)	NO		0.00	
TICKET_TYPE	varchar(10)	YES		NULL	
PARK_CODE	varchar(10)	YES	MUL	NULL	

4 rows in set (0.00 sec)

CREATE TABLE ATTRACTION (

ATTRACT_NO NUMERIC(10) PRIMARY KEY,

ATTRACT_NAME VARCHAR(35),

ATTRACT_AGE NUMERIC(3) DEFAULT 0 NOT NULL,

ATTRACT_CAPACITY NUMERIC(3) NOT NULL,

PARK_CODE VARCHAR(10),

INDEX (PARK_CODE),

CONSTRAINT FK_ATTRACT_PARK FOREIGN KEY(PARK_CODE) REFERENCES THEMEPARK(PARK_CODE));

```
mysql> describe attraction;
```

Field	Type	Null	Key	Default	Extra
ATTRACT_NO	decimal(10,0)	NO	PRI	NULL	
ATTRACT_NAME	varchar(35)	YES		NULL	
ATTRACT_AGE	decimal(3,0)	NO		0	
ATTRACT_CAPACITY	decimal(3,0)	NO		NULL	
PARK_CODE	varchar(10)	YES	MUL	NULL	

5 rows in set (0.00 sec)

CREATE TABLE HOURS (

EMP_NUM NUMERIC(4),

ATTRACT_NO NUMERIC(10),

HOURS_PER_ATTRACT NUMERIC(2) NOT NULL,

HOURLY_RATE NUMERIC(4,2) NOT NULL,

DATE_WORKED DATE NOT NULL,

INDEX (EMP_NUM),

INDEX (ATTRACT_NO),

CONSTRAINT PK_HOURS PRIMARY KEY(EMP_NUM, ATTRACT_NO, DATE_WORKED),

CONSTRAINT FK_HOURS_EMP FOREIGN KEY (EMP_NUM) REFERENCES EMPLOYEE(EMP_NUM),

CONSTRAINT FK_HOURS_ATTRACT FOREIGN KEY (ATTRACT_NO) REFERENCES
ATTRACTION(ATTRACT_NO));

```
mysql> describe hours;
```

Field	Type	Null	Key	Default	Extra
EMP_NUM	decimal(4,0)	NO	PRI	NULL	
ATTRACT_NO	decimal(10,0)	NO	PRI	NULL	
HOURS_PER_ATTRACT	decimal(2,0)	NO		NULL	
HOURLY_RATE	decimal(4,2)	NO		NULL	
DATE_WORKED	date	NO	PRI	NULL	

5 rows in set (0.00 sec)

```

CREATE TABLE SALES (
TRANSACTION_NO NUMERIC PRIMARY KEY,
PARK_CODE VARCHAR(10),
SALE_DATE DATE NOT NULL,
INDEX (PARK_CODE),
CONSTRAINT FK_SALES_PARK FOREIGN KEY(PARK_CODE) REFERENCES THEMEPARK(PARK_CODE));

```

```

mysql> describe sales;
+-----+-----+-----+-----+-----+-----+
| Field          | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| TRANSACTION_NO | decimal(10,0) | NO   | PRI | NULL    |       |
| PARK_CODE      | varchar(10)   | YES  | MUL | NULL    |       |
| SALE_DATE      | date          | NO   |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)

```

```

CREATE TABLE SALES_LINE (
TRANSACTION_NO NUMERIC,
LINE_NO NUMERIC(2,0) NOT NULL,
TICKET_NO NUMERIC(10) NOT NULL,
LINE_QTY NUMERIC(4) DEFAULT 0 NOT NULL,
LINE_PRICE NUMERIC(9,2) DEFAULT 0.00 NOT NULL,
INDEX (TRANSACTION_NO),
INDEX (TICKET_NO),
CONSTRAINT PK_SALES_LINE PRIMARY KEY (TRANSACTION_NO,LINE_NO),
CONSTRAINT FK_SALES_LINE_TICKET FOREIGN KEY (TICKET_NO) REFERENCES TICKET(TICKET_NO),
CONSTRAINT FK_SALES_LINE_SALES FOREIGN KEY (TRANSACTION_NO) REFERENCES
SALES(TRANSACTION_NO)
);

```

```
mysql> describe SALES_LINE;
```

Field	Type	Null	Key	Default	Extra
TRANSACTION_NO	decimal(10,0)	NO	PRI	NULL	
LINE_NO	decimal(2,0)	NO	PRI	NULL	
TICKET_NO	decimal(10,0)	NO	MUL	NULL	
LINE_QTY	decimal(4,0)	NO		0	
LINE_PRICE	decimal(9,2)	NO		0.00	

5 rows in set (0.01 sec)

Storing values:

```
/* CREATING AN INDEX ON EMP_LNAME IN THE EMPLOYEE TABLE */
```

```
CREATE INDEX EMP_LNAME_INDEX ON EMPLOYEE(EMP_LNAME(8));
```

```
/* ThemePark rows */
```

```
INSERT INTO THEMEPARK VALUES ('FR1001','FairyLand','PARIS','FR');
```

```
INSERT INTO THEMEPARK VALUES ('NL1202','Efling','NOORD','NL');
```

```
INSERT INTO THEMEPARK VALUES ('SP4533','AdventurePort','BARCELONA','SP');
```

```
INSERT INTO THEMEPARK VALUES ('SW2323','Labyrinthe','LAUSANNE','SW');
```

```
INSERT INTO THEMEPARK VALUES ('UK2622','MiniLand','WINDSOR','UK');
```

```
INSERT INTO THEMEPARK VALUES ('UK3452','PleasureLand','STOKE','UK');
```

```
INSERT INTO THEMEPARK VALUES ('ZA1342','GoldTown','JOHANNESBURG','ZA');
```

```
/* Employee rows */
```

```
INSERT INTO EMPLOYEE VALUES (100,'Ms','Calderdale','Emma','1972-06-15','1992-03-15','0181','324-9134','FR1001');
```

```
INSERT INTO EMPLOYEE VALUES (101,'Ms','Ricardo','Marshel','1978-03-19','1996-04-25','0181','324-4472','UK3452');
```

```
INSERT INTO EMPLOYEE VALUES (102,'Mr','Arshad','Arif','1969-11-14','1990-12-20','7253','675-8993','FR1001');
```

```
INSERT INTO EMPLOYEE VALUES (103,'Ms','Roberts','Anne','1974-10-16','1994-08-16','0181','898-3456','UK3452');
```

```
INSERT INTO EMPLOYEE VALUES (104,'Mr','Denver','Enrica','1980-11-08','2001-10-20','7253','504-4434','ZA1342');
```

```
INSERT INTO EMPLOYEE VALUES (105,'Ms','Namowa','Mirrelle','1990-03-14','2006-11-08','0181','890-3243','FR1001');
```

```
INSERT INTO EMPLOYEE VALUES (106,'Mrs','Smith','Gemma','1968-02-12','1989-01-05','0181','324-7845','ZA1342');
```

```
/* Ticket rows
```

```
*/
```

```
INSERT INTO TICKET VALUES (11001,24.99,'Adult', 'SP4533');
```

```
INSERT INTO TICKET VALUES (11002,14.99,'Child', 'SP4533');
```

```
INSERT INTO TICKET VALUES (11003,10.99,'Senior','SP4533');
```

```
INSERT INTO TICKET VALUES (13001,18.99,'Child','FR1001');
```

```
INSERT INTO TICKET VALUES (13002,34.99,'Adult','FR1001');
```

```
INSERT INTO TICKET VALUES (13003,20.99,'Senior','FR1001');
```

```
INSERT INTO TICKET VALUES (67832,18.56,'Child','ZA1342');
```

```
INSERT INTO TICKET VALUES (67833,28.67,'Adult','ZA1342');
```

```
INSERT INTO TICKET VALUES (67855,12.12,'Senior','ZA1342');
```

```
INSERT INTO TICKET VALUES (88567,22.50,'Child','UK3452');
```

```
INSERT INTO TICKET VALUES (88568,42.10,'Adult','UK3452');
```

```
INSERT INTO TICKET VALUES (89720,10.99,'Senior','UK3452');
```

```
/* Attraction rows
```

```
*/
```

```

INSERT INTO ATTRACTION VALUES (10034,'ThunderCoaster',11,34,'FR1001');
INSERT INTO ATTRACTION VALUES (10056,'SpinningTeacups',4,62,'FR1001');
INSERT INTO ATTRACTION VALUES (10067,'FlightToStars',11,24,'FR1001');
INSERT INTO ATTRACTION VALUES (10078,'Ant-Trap',23,30,'FR1001');
INSERT INTO ATTRACTION VALUES (10098,'Carnival',3,120,'FR1001');
INSERT INTO ATTRACTION VALUES (20056,'3D-Lego_Show',3,200,'UK3452');
INSERT INTO ATTRACTION VALUES (30011,'BlackHole2',12,34,'UK3452');
INSERT INTO ATTRACTION VALUES (30012,'Pirates',10,42,'UK3452');
INSERT INTO ATTRACTION VALUES (30044,'UnderSeaWord',4,80,'UK3452');
INSERT INTO ATTRACTION VALUES (98764,'GoldRush',5,80,'ZA1342');
/* Attraction with no name */
INSERT INTO ATTRACTION VALUES (10082,NULL,10,40,'ZA1342');

```

```

/* hours rows */

```

```

INSERT INTO HOURS VALUES (100,10034,6,6.5,'2007-05-18');
INSERT INTO HOURS VALUES (100,10034,6,6.5,'2007-05-20');
INSERT INTO HOURS VALUES (101,10034,6,6.5,'2007-05-18');
INSERT INTO HOURS VALUES (102,30012,3,5.99,'2007-05-23');
INSERT INTO HOURS VALUES (102,30044,6,5.99,'2007-05-21');
INSERT INTO HOURS VALUES (102,30044,3,5.99,'2007-05-22');
INSERT INTO HOURS VALUES (104,30011,6,7.2,'2007-05-21');
INSERT INTO HOURS VALUES (104,30012,6,7.2,'2007-05-22');
INSERT INTO HOURS VALUES (105,10078,3,8.5,'2007-05-18');
INSERT INTO HOURS VALUES (105,10098,3,8.5,'2007-05-18');

```

```
INSERT INTO HOURS VALUES (105,10098,6,8.5,'2007-05-19');
```

```
/* SALES rows */
```

```
INSERT INTO SALES VALUES (12781,'FR1001','2007-05-18');
```

```
INSERT INTO SALES VALUES (12782,'FR1001','2007-05-18');
```

```
INSERT INTO SALES VALUES (12783,'FR1001','2007-05-18');
```

```
INSERT INTO SALES VALUES (12784,'FR1001','2007-05-18');
```

```
INSERT INTO SALES VALUES (12785,'FR1001','2007-05-18');
```

```
INSERT INTO SALES VALUES (12786,'FR1001','2007-05-18');
```

```
INSERT INTO SALES VALUES (34534,'UK3452','2007-05-18');
```

```
INSERT INTO SALES VALUES (34535,'UK3452','2007-05-18');
```

```
INSERT INTO SALES VALUES (34536,'UK3452','2007-05-18');
```

```
INSERT INTO SALES VALUES (34537,'UK3452','2007-05-18');
```

```
INSERT INTO SALES VALUES (34538,'UK3452','2007-05-18');
```

```
INSERT INTO SALES VALUES (34539,'UK3452','2007-05-18');
```

```
INSERT INTO SALES VALUES (34540,'UK3452','2007-05-18');
```

```
INSERT INTO SALES VALUES (34541,'UK3452','2007-05-18');
```

```
INSERT INTO SALES VALUES (67589,'ZA1342','2007-05-18');
```

```
INSERT INTO SALES VALUES (67590,'ZA1342','2007-05-18');
```

```
INSERT INTO SALES VALUES (67591,'ZA1342','2007-05-18');
```

```
INSERT INTO SALES VALUES (67592,'ZA1342','2007-05-18');
```

```
INSERT INTO SALES VALUES (67593,'ZA1342','2007-05-18');
```

```
/* SALES_LINE rows */
```



```
INSERT INTO SALES_LINE VALUES (12781,1,13002,2,69.98);
INSERT INTO SALES_LINE VALUES (12781,2,13001,1,14.99);
INSERT INTO SALES_LINE VALUES (12782,1,13002,2,69.98);
INSERT INTO SALES_LINE VALUES (12783,1,13003,2,41.98);
INSERT INTO SALES_LINE VALUES (12784,2,13001,1,14.99);
INSERT INTO SALES_LINE VALUES (12785,1,13001,1,14.99);
INSERT INTO SALES_LINE VALUES (12785,2,13002,1,34.99);
INSERT INTO SALES_LINE VALUES (12785,3,13002,4,139.96);
INSERT INTO SALES_LINE VALUES (34534,1,88568,4,168.40);
INSERT INTO SALES_LINE VALUES (34534,2,88567,1,22.50);
INSERT INTO SALES_LINE VALUES (34534,3,89720,2,21.98);
INSERT INTO SALES_LINE VALUES (34535,1,88568,2,84.20);
INSERT INTO SALES_LINE VALUES (34536,1,89720,2,21.98);
INSERT INTO SALES_LINE VALUES (34537,1,88568,2,84.20);
INSERT INTO SALES_LINE VALUES (34537,2,88567,1,22.50);
INSERT INTO SALES_LINE VALUES (34538,1,89720,2,21.98);
INSERT INTO SALES_LINE VALUES (34539,1,89720,2,21.98);
INSERT INTO SALES_LINE VALUES (34539,2,88568,2,84.20);
INSERT INTO SALES_LINE VALUES (34540,1,88568,4,168.40);
INSERT INTO SALES_LINE VALUES (34540,2,88567,1,22.50);
INSERT INTO SALES_LINE VALUES (34540,3,89720,2,21.98);
INSERT INTO SALES_LINE VALUES (34541,1,88568,2,84.20);
INSERT INTO SALES_LINE VALUES (67589,1,67833,2,57.34);
INSERT INTO SALES_LINE VALUES (67589,2,67832,2,37.12);
INSERT INTO SALES_LINE VALUES (67590,1,67833,2,57.34);
INSERT INTO SALES_LINE VALUES (67590,2,67832,2,37.12);
```

```

INSERT INTO SALES_LINE VALUES (67591,1,67832,1,18.56);
INSERT INTO SALES_LINE VALUES (67591,2,67855,1,12.12);
INSERT INTO SALES_LINE VALUES (67592,1,67833,4,114.68);
INSERT INTO SALES_LINE VALUES (67593,1,67833,2,57.34);
INSERT INTO SALES_LINE VALUES (67593,2,67832,2,37.12);

```

```
commit;
```

```

SELECT PARK_CODE, TICKET_NO, TICKET_TYPE, TICKET_PRICE,
TICKET_PRICE + ROUND((TICKET_PRICE *0.1),2)

```

```
FROM TICKET;
```

```

mysql> SELECT PARK_CODE, TICKET_NO, TICKET_TYPE, TICKET_PRICE,
-> TICKET_PRICE + ROUND((TICKET_PRICE *0.1),2)
-> from ticket;
+-----+-----+-----+-----+-----+
| PARK_CODE | TICKET_NO | TICKET_TYPE | TICKET_PRICE | TICKET_PRICE + ROUND((TICKET_PRICE *0.1),2) |
+-----+-----+-----+-----+-----+
| 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 (0.03 sec)

```

```

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 (0.07 sec)

```
SELECT PARK_CODE, TICKET_NO, TICKET_TYPE,
TICKET_PRICE, TICKET_PRICE + ROUND((TICKET_PRICE *0.1),2)
AS "PRICE INCREASE"
FROM TICKET;
```

```
mysql> SELECT PARK_CODE, TICKET_NO, TICKET_TYPE,
-> TICKET_PRICE, TICKET_PRICE + ROUND((TICKET_PRICE *0.1),2)
-> AS "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 (0.02 sec)

task (3.2)

```
SELECT PARK_CODE, TICKET_TYPE, TICKET_PRICE
FROM TICKET
WHERE TICKET_PRICE > 20;
```

```
mysql> 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 (0.07 sec)
```

task (3.2)

```
SELECT PARK_CODE, TICKET_TYPE, TICKET_PRICE
FROM TICKET
WHERE TICKET_PRICE and 20;
```

/* no i did'n get the same result, i get all PARK_CODE,TICKET_TYPE,TICKET_PRICE */

```
mysql> SELECT PARK_CODE, TICKET_TYPE, TICKET_PRICE
-> FROM TICKET
-> WHERE TICKET_PRICE and 20;
```

PARK_CODE	TICKET_TYPE	TICKET_PRICE
SP4533	Adult	24.99
SP4533	Child	14.99
SP4533	Senior	10.99
FR1001	Child	18.99
FR1001	Adult	34.99
FR1001	Senior	20.99
ZA1342	Child	18.56
ZA1342	Adult	28.67
ZA1342	Senior	12.12
UK3452	Child	22.50
UK3452	Adult	42.10
UK3452	Senior	10.99

```
12 rows in set (0.05 sec)
```

task (3.3)

```
SELECT PARK_CODE, TICKET_TYPE, TICKET_PRICE
FROM TICKET
WHERE TICKET_PRICE < 20;
```

```
mysql> SELECT PARK_CODE, TICKET_TYPE, TICKET_PRICE
-> FROM TICKET
-> WHERE TICKET_PRICE < 20;
+-----+-----+-----+
| PARK_CODE | TICKET_TYPE | TICKET_PRICE |
+-----+-----+-----+
| SP4533    | Child       | 14.99        |
| SP4533    | Senior      | 10.99        |
| FR1001    | Child       | 18.99        |
| ZA1342    | Child       | 18.56        |
| ZA1342    | Senior      | 12.12        |
| UK3452    | Senior      | 10.99        |
+-----+-----+-----+
6 rows in set (0.00 sec)
```

task(3.4)

```
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 (0.07 sec)
```

```
SELECT *
FROM TICKET
WHERE TICKET_PRICE BETWEEN 30.00 AND 50.00;
```

```
mysql> SELECT *
-> FROM TICKET
-> WHERE TICKET_PRICE BETWEEN 30.00 AND 50.00;
```

TICKET_NO	TICKET_PRICE	TICKET_TYPE	PARK_CODE
13002	34.99	Adult	FR1001
88568	42.10	Adult	UK3452

```
2 rows in set (0.05 sec)
```

task (3.5)

select *

from hours

where HOURS_PER_ATTRACT between 5 and 10;

/* In order to displays the employee number, attraction no, the hours

worked per attraction and the date worked, first i have to select the table hours and then to display hours per attraction i use (between) key word */

```
mysql> select *
-> from hours
-> where HOURS_PER_ATTRACT between 5 and 10;
```

EMP_NUM	ATTRACT_NO	HOURS_PER_ATTRACT	HOURLY_RATE	DATE_WORKED
100	10034	6	6.50	2007-05-18
100	10034	6	6.50	2007-05-20
101	10034	6	6.50	2007-05-18
102	30044	6	5.99	2007-05-21
104	30011	6	7.20	2007-05-21
104	30012	6	7.20	2007-05-22
105	10098	6	8.50	2007-05-19

```
7 rows in set (0.00 sec)
```

/* use of (IN) or Selecting rows using the IN command */

SELECT *

FROM SALES_LINE

WHERE TRANSACTION_NO IN (12781, 67593);

```
mysql> SELECT *
-> FROM SALES_LINE
-> WHERE TRANSACTION_NO IN (12781, 67593);
```

TRANSACTION_NO	LINE_NO	TICKET_NO	LINE_QTY	LINE_PRICE
12781	1	13002	2	69.98
12781	2	13001	1	14.99
67593	1	67833	2	57.34
67593	2	67832	2	37.12

4 rows in set (0.04 sec)

TASK (3.6)

/* to display all tables that are of the type senior or child, i use IN operator which will display senior or child type from the table ticket */

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)

/* LINK (in order to find patterns within string attributes.) */

Task (3.7)

SELECT EMP_LNAME, EMP_FNAME, EMP_NUM

FROM EMPLOYEE

WHERE EMP_FNAME LIKE 'A%';

```
mysql> 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 (0.02 sec)
```

Task (3.8)

/* In order write query which finds all Theme Parks that have a name ending in 'Land', */

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)
```

/* NULL and IS NULL */

SELECT *

FROM ATTRACTION

WHERE ATTRACT_NAME IS NULL;

```
mysql> SELECT *
-> FROM ATTRACTION
-> WHERE ATTRACT_NAME IS NULL;
```

ATTRACT_NO	ATTRACT_NAME	ATTRACT_AGE	ATTRACT_CAPACITY	PARK_CODE
10082	NULL	10	40	ZA1342

```
1 row in set (0.02 sec)
```


TASK (3.9)

/* AND (Logical operator) */

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 (0.02 sec)

task (3.10)

/* displays the details of all attractions which are

suitable for children aged 10 or under and have a capacity of less than 100. first i choood attraction database and then choos attraction age which is less then 10 and

capacity which is less then 100 and attraction name which is not null */

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)
```

/* OR (operator) */

```
SELECT PARK_NAME, PARK_COUNTRY
FROM THEMEPARK
WHERE PARK_COUNTRY = 'FR'
OR PARK_COUNTRY = 'UK';
```

```
mysql> SELECT PARK_NAME, PARK_COUNTRY
-> FROM THEMEPARK
-> WHERE PARK_COUNTRY = 'FR'
-> OR PARK_COUNTRY = 'UK';
```

PARK_NAME	PARK_COUNTRY
FairyLand	FR
MiniLand	UK
PleasureLand	UK

```
3 rows in set (0.05 sec)
```

task (3.11)

/* this query is doing that first we have to select the attraction database and then choose the park_code with FR% mean

more then one characters of string and display the databases having attract capacity less then 50 or attract capacity greater then 100 */

```
SELECT *
FROM ATTRACTION
```

WHERE (PARK_CODE LIKE 'FR%'

AND ATTRACT_CAPACITY <50) OR (ATTRACT_CAPACITY > 100);

```
mysql> 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)

/* NOT (operator) */

SELECT *

FROM EMPLOYEE

WHERE NOT (EMP_NUM = 106);

```
mysql> SELECT *
-> FROM EMPLOYEE
-> WHERE NOT (EMP_NUM = 106);
```

EMP_NUM	EMP_TITLE	EMP_LNAME	EMP_FNAME	EMP_DOB	EMP_HIRE_DATE	EMP_AREA_CODE	EMP_PHONE	PARK_CODE
100	Ms	Calderdale	Emma	1972-06-15	1992-03-15	0181	324-9134	FR1001
101	Ms	Ricardo	Marshel	1978-03-19	1996-04-25	0181	324-4472	UK3452
102	Mr	Arshad	Arif	1969-11-14	1990-12-20	7253	675-8993	FR1001
103	Ms	Roberts	Anne	1974-10-16	1994-08-16	0181	898-3456	UK3452
104	Mr	Denver	Enrica	1980-11-08	2001-10-20	7253	504-4434	ZA1342
105	Ms	Namowa	Mirrelle	1990-03-14	2006-11-08	0181	890-3243	FR1001

6 rows in set (0.00 sec)

3.3 Sorting Data

/* ORDER BY FOR Decending order */

SELECT *

FROM EMPLOYEE

ORDER BY EMP_HIRE_DATE DESC;

```
mysql> SELECT *
-> FROM EMPLOYEE
-> ORDER BY EMP_HIRE_DATE DESC;
```

EMP_NUM	EMP_TITLE	EMP_LNAME	EMP_FNAME	EMP_DOB	EMP_HIRE_DATE	EMP_AREA_CODE	EMP_PHONE	PARK_CODE
105	Ms	Namowa	Mirrelle	1990-03-14	2006-11-08	0181	890-3243	FR1001
104	Mr	Denver	Enrica	1980-11-08	2001-10-20	7253	504-4434	ZA1342
101	Ms	Ricardo	Marshel	1978-03-19	1996-04-25	0181	324-4472	UK3452
103	Ms	Roberts	Anne	1974-10-16	1994-08-16	0181	898-3456	UK3452
100	Ms	Calderdale	Emma	1972-06-15	1992-03-15	0181	324-9134	FR1001
102	Mr	Arshad	Arif	1969-11-14	1990-12-20	7253	675-8993	FR1001
106	Mrs	Smith	Gemma	1968-02-12	1989-01-05	0181	324-7845	ZA1342

7 rows in set (0.02 sec)

Task 3.12

/* It is worth noting that if the ordering column has nulls, they are listed either first or last (depending on the RDBMS). The ORDER BY clause can be used in conjunction with other SQL commands and is listed last in the SELECT command sequence. */

```
SELECT *
FROM EMPLOYEE
ORDER BY EMP_LNAME, EMP_FNAME;
```

```
mysql> SELECT *
-> FROM EMPLOYEE
-> ORDER BY EMP_LNAME, EMP_FNAME;
```

EMP_NUM	EMP_TITLE	EMP_LNAME	EMP_FNAME	EMP_DOB	EMP_HIRE_DATE	EMP_AREA_CODE	EMP_PHONE	PARK_CODE
102	Mr	Arshad	Arif	1969-11-14	1990-12-20	7253	675-8993	FR1001
100	Ms	Calderdale	Emma	1972-06-15	1992-03-15	0181	324-9134	FR1001
104	Mr	Denver	Enrica	1980-11-08	2001-10-20	7253	504-4434	ZA1342
105	Ms	Namowa	Mirrelle	1990-03-14	2006-11-08	0181	890-3243	FR1001
101	Ms	Ricardo	Marshel	1978-03-19	1996-04-25	0181	324-4472	UK3452
103	Ms	Roberts	Anne	1974-10-16	1994-08-16	0181	898-3456	UK3452
106	Mrs	Smith	Gemma	1968-02-12	1989-01-05	0181	324-7845	ZA1342

7 rows in set (0.00 sec)

Task 3.13

/* The Query is doing that, select ticket_type & park_code from database called ticket, and choose ticket pprice which is greater then 15 and ticket type child. And display them in decending order. */

```
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 TICKET_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)
```

3.4 Listing Unique Values

/*The SQL command DISTINCT is used to produce a list of only those values that are different from one another. */

```
SELECT DISTINCT(PARK_CODE)
FROM ATTRACTION;
```

```
mysql> SELECT DISTINCT(PARK_CODE)
-> FROM ATTRACTION;
```

PARK_CODE
FR1001
UK3452
ZA1342

```
3 rows in set (0.09 sec)
```

TASK#1

```
SELECT PARK_CODE, PARK_NAME, PARK_CITY, PARK_COUNTRY
FROM THEMEPARK
WHERE PARK_CODE < 'UK2262';
```

```
mysql> SELECT PARK_CODE, PARK_NAME, PARK_CITY, PARK_COUNTRY
-> FROM THEMPARK
-> WHERE PARK_CODE < 'UK2262';
```

PARK_CODE	PARK_NAME	PARK_CITY	PARK_COUNTRY
FR1001	FairyLand	PARIS	FR
NL1202	Efling	NOORD	NL
SP4533	AdventurePort	BARCELONA	SP
SW2323	Labyrinthe	LAUSANNE	SW

4 rows in set (0.00 sec)

TASK#2

select sale_date

from sales

where sale_date='2007-05-18';

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

sale_date
2007-05-18
2007-05-18
2007-05-18
2007-05-18
2007-05-18
2007-05-18
2007-05-18
2007-05-18
2007-05-18
2007-05-18
2007-05-18
2007-05-18
2007-05-18
2007-05-18
2007-05-18
2007-05-18
2007-05-18
2007-05-18
2007-05-18
2007-05-18

19 rows in set (0.00 sec)

TASK#3

```

SELECT *
FROM TICKET
WHERE TICKET_PRICE BETWEEN 20.00 AND 30.00;

```

```

mysql> SELECT *
-> FROM TICKET
-> WHERE TICKET_PRICE BETWEEN 20.00 AND 30.00;
+-----+-----+-----+-----+
| 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)

```

TASK#4

```

select attract_capacity
from attraction
where attract_capacity>60;

```

```

mysql> select attract_capacity
-> from attraction
-> where attract_capacity>60;
+-----+
| attract_capacity |
+-----+
| 62 |
| 120 |
| 200 |
| 80 |
| 80 |
+-----+
5 rows in set (0.00 sec)

```