

```

MariaDB [assignment]> create table customer(
  -> custno varchar(4) NOT NULL primary key,
  -> custname varchar(30) NOT NULL,
  -> address varchar(15) NOT NULL,
  -> internal char(1) NOT NULL CHECK(internal = 'Y' OR internal = 'N'),
  -> contact varchar(20) NOT NULL,
  -> phone INT NOT NULL,
  -> city varchar(10) NOT NULL,
  -> state char(2) NOT NULL,
  -> zip char(5) NOT NULL
  -> );

```

Query OK, 0 rows affected (0.35 sec)

```

MariaDB [assignment]> describe customer;

```

Field	Type	Null	Key	Default	Extra
custno	varchar(4)	NO	PRI	NULL	
custname	varchar(30)	NO		NULL	
address	varchar(15)	NO		NULL	
internal	char(1)	NO		NULL	
contact	varchar(20)	NO		NULL	
phone	int(11)	NO		NULL	
city	varchar(10)	NO		NULL	
state	char(2)	NO		NULL	
zip	char(5)	NO		NULL	

9 rows in set (0.15 sec)

```

MariaDB [assignment]> create table Employee(
  -> empno char(4) NOT NULL primary key,
  -> empname varchar(20) NOT NULL,
  -> department varchar(20) NOT NULL,
  -> email varchar(20) NOT NULL,
  -> constraint uc_email unique (email),
  -> phone varchar(6) NOT NULL
  -> );

```

Query OK, 0 rows affected (0.49 sec)

```

MariaDB [assignment]> describe Employee;

```

Field	Type	Null	Key	Default	Extra
empno	char(4)	NO	PRI	NULL	
empname	varchar(20)	NO		NULL	
department	varchar(20)	NO		NULL	
email	varchar(20)	NO	UNI	NULL	
phone	varchar(6)	NO		NULL	

5 rows in set (0.10 sec)

```

MariaDB [assignment]> create table Facility(
  -> facno char(4) NOT NULL primary key,
  -> facname varchar(40) NOT NULL
  -> );

```

Query OK, 0 rows affected (0.24 sec)

```

MariaDB [assignment]> describe Facility;

```

Field	Type	Null	Key	Default	Extra
facno	char(4)	NO	PRI	NULL	
facname	varchar(40)	NO		NULL	

2 rows in set (0.06 sec)

```

MariaDB [assignment]> create table EventRequest(
  -> eventno char(4) NOT NULL primary key,
  -> dateheld date NOT NULL,
  -> datereq date NOT NULL,
  -> facno char(4) NOT NULL,
  -> custno varchar(4) NOT NULL,
  -> dateauth date,
  -> status varchar(20) NOT NULL,
  -> estcost varchar(15) NOT NULL,
  -> estaudience int NOT NULL,
  -> budno int,
  ->
  -> constraint fk_custno foreign key(custno)
  ->     references customer(custno) ON DELETE CASCADE
  ->     ON UPDATE CASCADE,
  ->
  -> constraint fk_fac foreign key(facno)
  ->     references Facility(facno) ON DELETE CASCADE
  ->     ON UPDATE CASCADE
  -> );

```

Query OK, 0 rows affected (0.25 sec)

```

MariaDB [assignment]> describe EventRequest;

```

Field	Type	Null	Key	Default	Extra
eventno	char(4)	NO	PRI	NULL	
dateheld	date	NO		NULL	
datereq	date	NO		NULL	
facno	char(4)	NO	MUL	NULL	
custno	varchar(4)	NO	MUL	NULL	
dateauth	date	YES		NULL	
status	varchar(20)	NO		NULL	
estcost	varchar(15)	NO		NULL	
estaudience	int(11)	NO		NULL	
budno	int(11)	YES		NULL	

10 rows in set (0.06 sec)

```

MariaDB [assignment]> create table location(
  -> locno char(4) not null primary key,
  -> facno char(4) NOT NULL,
  -> locname varchar(30) not null,
  ->
  -> constraint fk_facno foreign key(facno)
  ->   references Facility(facno) ON DELETE CASCADE
  ->   ON UPDATE CASCADE
  -> );
Query OK, 0 rows affected (0.44 sec)

```

```

MariaDB [assignment]> describe location;

```

Field	Type	Null	Key	Default	Extra
locno	char(4)	NO	PRI	NULL	
facno	char(4)	NO	MUL	NULL	
locname	varchar(30)	NO		NULL	

```

MariaDB [assignment]> create table ResourceTbl(
  -> resno char(4) not null primary key,
  -> resname varchar(20) not null,
  -> rate numeric(2,2) not null
  -> );
Query OK, 0 rows affected (0.20 sec)

```

```

MariaDB [assignment]> describe ResourceTbl;

```

Field	Type	Null	Key	Default	Extra
resno	char(4)	NO	PRI	NULL	
resname	varchar(20)	NO		NULL	
rate	decimal(2,2)	NO		NULL	

```

3 rows in set (0.02 sec)

```

```

EventRequest(eventno) ON DELETE CASCADE
MariaDB [assignment]> create table eventplan(
  -> planno char(4),
  -> eventno char(4) NOT NULL,
  -> workdate date not null,
  -> notes varchar(30) null,
  -> activity varchar(15) not null,
  -> empno char(4) null,
  -> constraint fok_events foreign key(eventno)
  -> references EventRequest(eventno)
  -> ON DELETE CASCADE ON UPDATE CASCADE,
  ->
  -> constraint fok_femp foreign key(empno)
  -> references employee(empno)
  -> ON DELETE CASCADE ON UPDATE CASCADE
  -> );

```

Query OK, 0 rows affected (0.24 sec)

```

MariaDB [assignment]> describe eventplan;

```

Field	Type	Null	Key	Default	Extra
planno	char(4)	YES		NULL	
eventno	char(4)	NO	MUL	NULL	
workdate	date	NO		NULL	
notes	varchar(30)	YES		NULL	
activity	varchar(15)	NO		NULL	
empno	char(4)	YES	MUL	NULL	

6 rows in set (0.06 sec)

```

MariaDB [assignment]> create table eventPlanLine(
  -> planNo char(4) not null,
  -> lineno int not null,
  -> constraint pk_id primary key(planNo , lineno),
  ->
  -> TimeStart datetime not null,
  -> TimeEnd datetime not null,
  -> numberFLD int not null,
  -> locno char(4) not null,
  -> resno char(4) not null,
  ->
  -> constraint fk_locno1 foreign key(locno)
  ->     references location(locno) ON DELETE CASCADE
  ->     ON UPDATE CASCADE,
  ->
  -> constraint fk_resno foreign key(resno)
  ->     references resourcetbl(resno) ON DELETE CASCADE
  ->     ON UPDATE CASCADE
  -> );

```

Query OK, 0 rows affected (0.24 sec)

```

MariaDB [assignment]> describe eventPlanLine;

```

Field	Type	Null	Key	Default	Extra
planNo	char(4)	NO	PRI	NULL	
lineno	int(11)	NO	PRI	NULL	
TimeStart	datetime	NO		NULL	
TimeEnd	datetime	NO		NULL	
numberFLD	int(11)	NO		NULL	
locno	char(4)	NO	MUL	NULL	
resno	char(4)	NO	MUL	NULL	

7 rows in set (0.02 sec)

Part(A)

```

MariaDB [assignment]> select distinct city,state,zip from customer;

```

city	state	zip
Boulder	CO	80309
Louisville	CO	80027

2 rows in set (0.09 sec)

```

MariaDB [assignment]>
MariaDB [assignment]> select empname ,department,phone,email
->     from employee
->     where phone like '3-%';

```

empname	department	phone	email
Chuck Coordinator	Administration	3-1111	chuck@colorado.edu
Sally Supervisor	Planning	3-2222	sally@colorado.edu
Alan Administrator	Administration	3-3333	alan@colorado.edu

3 rows in set (0.03 sec)

```

MariaDB [assignment]> select rate from resourcetbl
->     where rate between 10 AND 20
->     order by rate;

```

rate
10.00
10.00
10.00
15.00
15.00
20.00

6 rows in set (0.05 sec)

```

MariaDB [assignment]> select eventno, dateauth,status
->     from EventRequest
->     where status =('Approved' or 'Denied')
->     and dateauth like '2013-07%';

```

eventno	dateauth	status
E102	2013-07-31	Approved
E104	2013-07-31	Approved
E106	2013-07-31	Approved
E107	2013-07-31	Denied

4 rows in set, 16 warnings (0.05 sec)

```

MariaDB [assignment]> select locno as location_number , locname as location_name
-> from location
-> where facno= (select facno from Facility
-> where facname like'Basketball%');

```

```

+-----+-----+
| location_number | location_name |
+-----+-----+
| L103            | Locker room   |
| L105            | Gate          |
+-----+-----+
2 rows in set (0.00 sec)

```

```

MariaDB [assignment]> select planNo,count(LINENO) as event_plan_line,sum(numberFLD) as number_of_resources
-> from eventplanline
-> group by planNo;

```

```

+-----+-----+-----+
| planNo | event_plan_line | number_of_resources |
+-----+-----+-----+
| P100   | 4               | 7                   |
| P101   | 3               | 8                   |
| P102   | 3               | 8                   |
| P103   | 3               | 8                   |
| P104   | 2               | 8                   |
| P105   | 2               | 8                   |
| P199   | 1               | 1                   |
| P349   | 1               | 1                   |
| P85    | 3               | 10                  |
| P95    | 5               | 16                  |
+-----+-----+-----+
10 rows in set (0.00 sec)

```

PART B

```

MariaDB [assignment]> select a.eventno,dateheld,count(planno)
-> from eventrequest a,eventplan b
-> where workdate between '2013-12-01' and '2013-12-31'
-> and a.eventno=b.eventno group by planno
-> having count(planno)>1;
Empty set (0.07 sec)

```

```

MariaDB [assignment]> select planno,eventno,workdate,activity
->   from eventplan
->   where workdate like '2013-12%'
->   and
->   eventno in(select eventno from EventRequest
-> where facno = (Select facno from facility
-> where facname = 'Basketball arena')
-> );

```

planno	eventno	workdate	activity
P101	E104	2013-12-03	Operation
P102	E105	2013-12-05	Operation
P103	E106	2013-12-12	Operation
P349	E106	2013-12-12	Setup

4 rows in set (0.39 sec)

```

MariaDB [assignment]> select a.planno , a.lineno , b.resname , a.numberFLD , c.locname , a.TimeStart,a.TimeEnd
-> from eventPlanLine as a,resourceTBL as b , location as c
-> where c.facno = (select facno from facility
-> where facname = 'basketball arena')
-> and a.planno in(select planno from EventPlan
-> where activity = 'Operation'
-> and workdate between '2013-10-01' and '2013-12-31')
-> and a.resno = b.resno
-> and c.locno = a.locno;

```

planno	lineno	resname	numberFLD	locname	TimeStart	TimeEnd
P101	1	attendant	2	Locker room	2013-12-03 18:00:00	2013-12-03 20:00:00
P101	3	nurse	2	Locker room	2013-12-03 19:00:00	2013-12-03 20:00:00
P102	1	attendant	2	Locker room	2013-12-05 18:00:00	2013-12-05 19:00:00
P102	3	nurse	2	Locker room	2013-12-05 19:00:00	2013-12-05 22:00:00
P103	1	attendant	2	Locker room	2013-12-12 18:00:00	2013-12-12 21:00:00
P103	3	nurse	2	Locker room	2013-12-12 19:00:00	2013-12-12 22:00:00
P101	2	attendant	4	Gate	2013-12-03 18:30:00	2013-12-03 19:00:00
P102	2	attendant	4	Gate	2013-12-05 18:00:00	2013-12-05 21:00:00
P103	2	attendant	4	Gate	2013-12-12 18:00:00	2013-12-12 21:00:00

9 rows in set (0.00 sec)

```

MariaDB [assignment]> select a.planno , a.lineno , b.resname , a.numberFLD , c.locname , a.TimeStart,a.TimeEnd
-> from eventPlanLine as a,resourceTBL as b , location as c
-> where c.facno = (select facno from facility
-> where facname = 'basketball arena')
-> and a.planno in(select planno from EventPlan
-> where activity = 'Operation'
-> and workdate between '2013-10-01' and '2013-12-31')
-> and a.resno = b.resno
-> and c.locno = a.locno;

```

planno	lineno	resname	numberFLD	locname	TimeStart	TimeEnd
P101	2	attendant	4	Gate	2013-12-03 18:30:00	2013-12-03 19:00:00
P102	2	attendant	4	Gate	2013-12-05 18:00:00	2013-12-05 21:00:00
P103	2	attendant	4	Gate	2013-12-12 18:00:00	2013-12-12 21:00:00

3 rows in set (0.13 sec)

PartC


```
MariaDB [assignment]> insert into facility(facno,facname)
-> values
-> ('F104','Swimming Pool');
Query OK, 1 row affected (0.20 sec)
```

```
MariaDB [assignment]> select * from facility;
```

```
+-----+-----+
| facno | facname          |
+-----+-----+
| F100  | Football stadium |
| F101  | Basketball arena |
| F102  | Baseball field   |
| F103  | Recreation room  |
| F104  | Swimming Pool    |
+-----+-----+
5 rows in set (0.00 sec)
```

```
MariaDB [assignment]> insert into location(locno,facno,locname)
-> values
-> ('L107','F104','Door');
Query OK, 1 row affected (0.08 sec)
```

```
MariaDB [assignment]> select * from location;
```

```
+-----+-----+-----+
| locno | facno | locname          |
+-----+-----+-----+
| L100  | F100  | Locker room      |
| L101  | F100  | Plaza            |
| L102  | F100  | Vehicle gate     |
| L103  | F101  | Locker room      |
| L104  | F100  | Ticket Booth     |
| L105  | F101  | Gate             |
| L106  | F100  | Pedestrian gate  |
| L107  | F104  | Door             |
+-----+-----+-----+
8 rows in set (0.00 sec)
```

```
MariaDB [assignment]> insert into location(locno,facno,locname)
-> values
-> ('L108','F104','Locker Room');
Query OK, 1 row affected (0.05 sec)
```

```
MariaDB [assignment]> select * from location;
```

```
+-----+-----+-----+
| locno | facno | locname      |
+-----+-----+-----+
| L100  | F100  | Locker room  |
| L101  | F100  | Plaza        |
| L102  | F100  | Vehicle gate |
| L103  | F101  | Locker room  |
| L104  | F100  | Ticket Booth |
| L105  | F101  | Gate         |
| L106  | F100  | Pedestrian gate |
| L107  | F104  | Door         |
| L108  | F104  | Locker Room  |
+-----+-----+-----+
9 rows in set (0.00 sec)
```

```
MariaDB [assignment]> update location
-> set
-> locname = 'Gate'
-> where locname = 'Door';
Query OK, 1 row affected (0.05 sec)
Rows matched: 1  Changed: 1  Warnings: 0
```

```
MariaDB [assignment]> select * from location;
```

```
+-----+-----+-----+
| locno | facno | locname      |
+-----+-----+-----+
| L100  | F100  | Locker room  |
| L101  | F100  | Plaza        |
| L102  | F100  | Vehicle gate |
| L103  | F101  | Locker room  |
| L104  | F100  | Ticket Booth |
| L105  | F101  | Gate         |
| L106  | F100  | Pedestrian gate |
| L107  | F104  | Gate         |
| L108  | F104  | Locker Room  |
+-----+-----+-----+
9 rows in set (0.00 sec)
```

```
MariaDB [assignment]> delete from location
->     where locname = 'locker room'
->     and locno = 'L108';
Query OK, 1 row affected (0.07 sec)
```

```
MariaDB [assignment]> select * from location;
```

locno	facno	locname
L100	F100	Locker room
L101	F100	Plaza
L102	F100	Vehicle gate
L103	F101	Locker room
L104	F100	Ticket Booth
L105	F101	Gate
L106	F100	Pedestrian gate
L107	F104	Gate

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