

MCAC104
DATABASE SYSTEM
ASSIGNMENT 3
SUBMITTED BY
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MCA(1st SEM)

a).Identify primary and foreign keys.

PRIMARY KEYS : suppliers(Sno),Parts(pno),Project(Jno)

Foreign KEYS : Shipment(Sno,Pno,Jno)

b).Get supplier numbers for suppliers in Paris with status>20.

```
mysql> SELECT sno FROM suppliers WHERE scity="paris" AND status
> 20;
```

```
+-----+
```

```
| sno |
```

```
+-----+
```

```
| s1  |
```

```
| s4  |
```

```
+-----+
```

c). Get suppliers details for suppliers who supply part P2.

Display the supplier list in increasing order

```
mysql> SELECT S.sno,S.sname,S.status,S.scity FROM suppliers as
S,shipment as SH WHERE S.sno = SH.sno AND SH.PNO = "P2" ORDER BY
S.sno ASC;
```

```
+-----+-----+-----+-----+
```

```
| sno | sname | status | scity |
```

```
+-----+-----+-----+-----+
```

```
| s2  | Nancy | 20.00 | London |
```

```
+-----+-----+-----+-----+
```

d).Get suppliers names for suppliers who do not supply part P2.

```
mysql> SELECT suppliers.* FROM suppliers JOIN shipment ON
suppliers.sno = shipment.sno AND shipment.pno!="P2";
```

```
+-----+-----+-----+-----+
```

```
| sno | sname | status | scity |
```

```
+-----+-----+-----+-----+
```

```
| s1  | Ajay  | 30.00 | Paris  |
```

```
| s3  | Ram   | 40.00 | New York |
```

```
| s4 | Isha | 70.00 | Paris |
| s5 | Ayush | 30.00 | Delhi |
| s6 | Hema | 10.00 | Chennai |
| s7 | Seema | 45.00 | London |
| s8 | Riya | 23.00 | Ontario |
```

```
+-----+-----+-----+-----+
```

7 rows in set (0.00 sec)

e). For each shipment get full shipment details, including total shipment weights.

```
mysql> SELECT suppliers.*, parts.*, project.*, shipment.qty *
parts.weight AS total_weight FROM suppliers, parts, project,
shipment WHERE shipment.sno = suppliers.sno AND shipment.pno =
parts.pno AND shipment.jno = project.jno;
```

```
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| sno | sname | status | scity | pno | pname | colour | weight | city | jno | jname | jcity | total_weight |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| s1 | Ajay | 30.00 | Paris | p1 | A | red | 7.00 | Paris | j1 | j | Chennai | 2800 |
| s2 | Nancy | 20.00 | London | p2 | B | blue | 20.00 | London | j2 | K | London | 10000 |
| s3 | Ram | 40.00 | New York | p3 | c | green | 17.00 | Newyork | j3 | L | Paris | 5950 |
| s4 | Isha | 70.00 | Paris | p4 | D | black | 21.00 | Paris | j4 | M | Ontario | 2100 |
| s5 | Ayush | 30.00 | Delhi | p5 | E | red | 9.00 | Ontario | j5 | N | Delhi | 1800 |
| s6 | Hema | 10.00 | Chennai | p6 | F | grey | 10.00 | Delhi | j6 | O | Chennai | 6000 |
| s7 | Seema | 45.00 | London | p7 | G | silver | 18.00 | Chennai | j7 | P | London | 12600 |
| s8 | Riya | 23.00 | Ontario | p8 | H | red | 7.00 | Delhi | j8 | Q | New York | 1750 |
```

```
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+6 rows in
set (0.00 sec)
```

f). Get all the shipments where the quantity is in the range 300 to 750 inclusive.

```
mysql> SELECT * FROM shipment WHERE qty BETWEEN 300 AND 750;
```

```
+-----+-----+-----+-----+
| sno | pno | jno | qty |
+-----+-----+-----+-----+
| S1 | P1 | J1 | 400 |
| S2 | P2 | J2 | 500 |
| S3 | P3 | J3 | 350 |
```

S6	P6	J6	600	
S7	P7	J7	700	
+-----+-----+-----+-----+				

5 rows in set (0.00 sec)

g). Get part nos. for parts that either weigh more than 16 pounds or are supplied by suppliers S2, or both.

```
mysql> SELECT pno FROM parts WHERE weight > 16 OR pno IN (SELECT
pno FROM shipment WHERE sno = 'S2');
```

+-----+
pno
+-----+
p2
p3
p4
p7
+-----+

4 rows in set (0.00 sec)

h).Get the names of cities that store more than five red parts.

```
mysql> SELECT city FROM parts WHERE colour = 'red' GROUP BY city
HAVING COUNT(*) > 5;
```

Empty set (0.00 sec)

5 rows in set (0.00 sec)

i). Get full details of parts supplied by a supplier in London.

```
mysql> SELECT p.* FROM parts AS p, suppliers AS s, shipment AS
sh WHERE sh.sno = s.sno AND sh.pno = p.pno AND s.scity =
'London';
```

+-----+-----+-----+-----+-----+
pno pname colour weight city
+-----+-----+-----+-----+-----+
p2 B blue 20.00 London

p7	G	silver	18.00	Chennai	
----	---	--------	-------	---------	--

+-----+	+-----+	+-----+	+-----+	+-----+	+-----+
---------	---------	---------	---------	---------	---------

2 rows in set (0.00 sec)

j).Get part numbers for part supplied by a supplier in London to a project in London

```
mysql> SELECT p.pno FROM parts AS p, suppliers AS s, shipment
AS sh WHERE sh.sno = s.sno AND sh.pno = p.pno AND s.scity =
'London' AND p.city = 'London';
```

+-----+

pno

+-----+

p2

+-----+

1 row in set (0.00 sec)

k). Get the total number of project supplied by a supplier (say, S1).

```
mysql> SELECT sno, COUNT(jno) FROM shipment GROUP BY sno;
```

+-----+	+-----+
---------	---------

sno	COUNT(jno)
-----	------------

+-----+	+-----+
---------	---------

S1	1
----	---

S2	1
----	---

S3	1
----	---

S4	1
----	---

S5	1
----	---

S6	1
----	---

S7	1
----	---

S8	1
----	---

+-----+	+-----+
---------	---------

8 rows in set (0.00 sec)

1).Get the total quantity of a part (say, P1) supplied by a supplier (say, S1).

```
mysql> SELECT shipment.sno, shipment.pno, shipment.qty *  
parts.weight AS total_quantity FROM shipment JOIN parts ON  
parts.pno = shipment.pno;
```

```
+-----+-----+-----+  
| sno | pno | total_quantity |  
+-----+-----+-----+  
| S1  | P1  |          2800 |  
| S2  | P2  |         10000 |  
| S3  | P3  |          5950 |  
| S4  | P4  |          2100 |  
| S5  | P5  |          1800 |  
| S6  | P6  |          6000 |  
| S7  | P7  |         12600 |  
| S8  | P8  |          1750 |  
+-----+-----+-----+
```

8 rows in set (0.00 sec)