

## Week-8 Supplier Database additional queries

```
use sup;
```

```
SELECT p.pid, p.pname, s.sname, c.cost  
FROM Catalog c  
JOIN Part p ON c.pid = p.pid  
JOIN Supplier s ON c.sid = s.sid  
WHERE c.cost = (SELECT MAX(cost) FROM Catalog);
```

|   | pid   | pname   | sname | cost  |
|---|-------|---------|-------|-------|
| ▶ | 20002 | Charger | Johns | 70.00 |
|   | 20001 | Book    | Kraft | 70.00 |

```
SELECT s.sname  
FROM Supplier s  
WHERE NOT EXISTS (  
    SELECT 1  
    FROM Catalog c  
    JOIN Part p ON c.pid = p.pid  
    WHERE c.sid = s.sid  
    AND p.color = 'red'  
);
```

| Result Grid |       |
|-------------|-------|
|             |       |
|             | sname |

```
SELECT s.sname,  
    SUM(c.cost) AS total_value  
FROM Supplier s  
LEFT JOIN Catalog c ON s.sid = c.sid  
GROUP BY s.sname;
```

| Result Grid |             |             |
|-------------|-------------|-------------|
|             | sname       | total_value |
| ▶           | Acme Widget | 225.00      |
|             | Johns       | 200.00      |
|             | Reliance    | 110.00      |
|             | Kraft       | 95.00       |

```

SELECT s.sname
FROM Supplier s
JOIN Catalog c ON s.sid = c.sid
WHERE c.cost < 20
GROUP BY s.sname
HAVING COUNT(*) >= 2;

```

```

SELECT p.pid, p.pname, s.sname, c.cost
FROM Catalog c
JOIN Part p ON c.pid = p.pid
JOIN Supplier s ON c.sid = s.sid
WHERE c.cost = (
    SELECT MIN(c2.cost)
    FROM Catalog c2
    WHERE c2.pid = c.pid
)
ORDER BY p.pid;

```

|   | pid   | pname   | sname       | cost  |
|---|-------|---------|-------------|-------|
| ▶ | 20001 | Book    | Johns       | 45.00 |
|   | 20002 | Charger | Acme Widget | 60.00 |
|   | 20003 | Mobile  | Reliance    | 30.00 |
|   | 20004 | Pen     | Johns       | 35.00 |
|   | 20005 | Pencil  | Reliance    | 15.00 |

```

CREATE VIEW SupplierPartCount AS
SELECT s.sid, s.sname, COUNT(c.pid) AS total_parts
FROM Supplier s
LEFT JOIN Catalog c ON s.sid = c.sid
GROUP BY s.sid, s.sname;

```

```
CREATE VIEW MostExpensiveSupplierPerPart AS
SELECT c.pid, p.pname, s.sname, c.cost
FROM Catalog c
JOIN Part p ON c.pid = p.pid
JOIN Supplier s ON c.sid = s.sid
WHERE c.cost = (
    SELECT MAX(c2.cost)
    FROM Catalog c2
    WHERE c2.pid = c.pid
);
```

```
DELIMITER $$
```

```
CREATE TRIGGER prevent_low_cost
BEFORE INSERT ON Catalog
FOR EACH ROW
BEGIN
IF NEW.cost < 1 THEN
    SIGNAL SQLSTATE '45000'
    SET MESSAGE_TEXT = 'Cost cannot be less than 1';
END IF;
END$$
```

```
DELIMITER ;
```

```
DELIMITER $$

CREATE TRIGGER set_default_cost
BEFORE INSERT ON Catalog
FOR EACH ROW
BEGIN
```

```
IF NEW.cost IS NULL THEN
    SET NEW.cost = 50;
END IF;
END$$
```