Identify primary keys and foreign keys for following database. Create tables and execute queries for
 given statements.
 supplier(supplierid,sname,saddress)
 parts(part_id,part_name,color);
 catalog(supplierid,part_id,cost);
 Write queries for the following questions:
1. Find name of supplier who supply 'green' parts.
2. Find name of suppliers who supply both blue and green parts.
3. Find supplier who supply all parts.
4. Find total cost of red parts.
5. Find supplier who supply green parts with minimum cost.
6. Update color of part having part_id = 4 and supplier_id = 2.


```sql
CREATE TABLE supplier (
        supplierid INT PRIMARY KEY,
    sname VARCHAR(100),
    saddress VARCHAR(100)
);

CREATE TABLE parts (
        part_id INT PRIMARY KEY,
    part_name VARCHAR(50),
    color VARCHAR(50)
);

CREATE TABLE catalog (
        supplierid INT,
    part_id INT,
    cost INT,
    PRIMARY KEY (supplierid, part_id),
    FOREIGN KEY (supplierid) REFERENCES supplier (supplierid),
    FOREIGN KEY (part_id) REFERENCES parts (part_id)
);

-- Insert into supplier
INSERT INTO supplier (supplierid, sname, saddress) VALUES
(1, 'Alpha Corp', 'Delhi'),
(2, 'Beta Ltd', 'Mumbai'),
(3, 'Gamma Inc', 'Chennai');

-- Insert into parts
INSERT INTO parts (part_id, part_name, color) VALUES
(1, 'Bolt', 'green'),
(2, 'Nut', 'blue'),
(3, 'Screw', 'red'),
(4, 'Washer', 'green');
```

```sql
-- Insert into catalog
INSERT INTO catalog (supplierid, part_id, cost) VALUES
(1, 1, 50),
(1, 2, 60),
(1, 3, 70),
(2, 1, 45),
(2, 2, 55),
(2, 4, 30),
(3, 1, 55),
(3, 2, 65),
(3, 3, 75),
(3, 4, 35);

-- 1. Find name of supplier who supply 'green' parts
SELECT DISTINCT s.sname
FROM supplier s
JOIN catalog c ON s.supplierid = c.supplierid
JOIN parts p ON c.part_id = p.part_id
WHERE p.color = 'green';

-- 2. Find name of suppliers who supply both blue and green parts
SELECT s.sname
FROM supplier s
WHERE s.supplierid IN (
    SELECT c1.supplierid
    FROM catalog c1
    JOIN parts p1 ON c1.part_id = p1.part_id
    WHERE p1.color = 'green'
)
AND s.supplierid IN (
    SELECT c2.supplierid
    FROM catalog c2
    JOIN parts p2 ON c2.part_id = p2.part_id
    WHERE p2.color = 'blue'
);

-- 3. Find supplier who supply all parts
SELECT s.sname
FROM supplier s
JOIN catalog c ON s.supplierid = c.supplierid
GROUP BY s.supplierid, s.sname
HAVING COUNT(DISTINCT c.part_id) = (SELECT COUNT(*) FROM parts);

-- 4. Find total cost of red parts
SELECT SUM(c.cost) AS total_red_part_cost
FROM catalog c
JOIN parts p ON c.part_id = p.part_id
WHERE p.color = 'red';
```

```sql
-- 5. Find supplier who supply green parts with minimum cost
SELECT s.sname, c.cost
FROM catalog c
JOIN parts p ON c.part_id = p.part_id
JOIN supplier s ON c.supplierid = s.supplierid
WHERE p.color = 'green' AND c.cost = (
    SELECT MIN(c2.cost)
    FROM catalog c2
    JOIN parts p2 ON c2.part_id = p2.part_id
    WHERE p2.color = 'green'
);

-- 6. Update color of part having part_id = 4 and supplier_id = 2
UPDATE parts
SET color = 'yellow'
WHERE part_id = 4;
```