

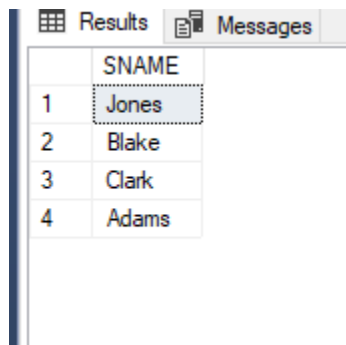
Lab 2 Part 2

Question 1

Statement:

```
SELECT SNAME
FROM supplier
WHERE NOT EXISTS
(
    SELECT PNO
    FROM shipment
    WHERE PNO = 'P3'
    AND supplier.SNO = shipment.SNO
);
```

Output:



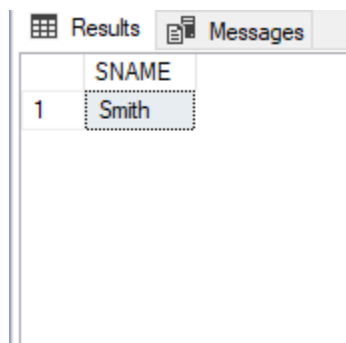
	SNAME
1	Jones
2	Blake
3	Clark
4	Adams

Question 2

Statement:

```
SELECT SNAME
FROM supplier AS S1
WHERE EXISTS
(
    SELECT SP.SNO
    FROM shipment AS SP JOIN parts AS P
    ON SP.PNO = P.PNO
    WHERE P.COLOR = 'Red'
    AND S1.SNO = SP.SNO
    GROUP BY SP.SNO
    HAVING COUNT(*) > 1
);
```

Output:



	SNAME
1	Smith

Question 3

Statement:

```
SELECT SNAME
FROM supplier AS S
WHERE EXISTS
(
    SELECT P1.PNO
    FROM parts AS P1 JOIN shipment AS SP1
    ON P1.PNO = SP1.PNO
```

```

WHERE P1.COLOR = 'Red'
AND S.SNO = SP1.SNO
)
AND EXISTS
(
SELECT P2.PNO
FROM parts AS P2 JOIN shipment AS SP2
ON P2.PNO = SP2.PNO
WHERE P2.PNO = 'P2'
AND S.SNO = SP2.SNO
);

```

Output:

Results		Messages
	SNAME	
1	Smith	
2	Jones	
3	Clark	

Question 4

Statement:

```

SELECT P.PNO, SNAME
FROM parts AS P JOIN shipment AS SP
ON P.PNO = SP.PNO JOIN supplier AS S
ON SP.SNO = S.SNO
WHERE EXISTS
(
SELECT PNO
FROM shipment
GROUP BY PNO
HAVING COUNT(*) > 1
AND P.PNO = shipment.PNO
);

```

Output:

Results			Messages
	PNO	SNAME	
1	P1	Smith	
2	P2	Smith	
3	P4	Smith	
4	P5	Smith	
5	P1	Jones	
6	P2	Jones	
7	P2	Blake	
8	P2	Clark	
9	P4	Clark	
10	P5	Clark	

Question 5

Statement:

```

SELECT PNAME, PNO
FROM parts AS P
WHERE NOT EXISTS

```

```
(
    SELECT SNO
    FROM supplier AS S
    WHERE NOT EXISTS
    (
        SELECT SNO
        FROM shipment AS SP
        WHERE P.PNO = SP.PNO
        AND S.SNO = SP.SNO
    )
);
```

Output:

Results		Messages	
PNAME	PNO		

Question 6

Statement:

```
SELECT SNAME
FROM supplier AS S1
WHERE NOT EXISTS
(
    SELECT *
    FROM parts AS P1, shipment AS SP1
    WHERE P1.PNO = SP1.PNO
    AND P1.PNO IN
    (
        SELECT P2.PNO
        FROM parts AS P2
        WHERE P2.COLOR = 'Red'
    )
    AND NOT EXISTS
    (
        SELECT *
        FROM shipment AS SP2
        WHERE SP2.SNO = S1.SNO
        AND P1.PNO = SP2.PNO
    )
);
```

Output:

Results		Messages
	SNAME	
1	Smith	

Question 7

Statement:

```

SELECT S1.SNAME
FROM supplier AS S1
WHERE NOT EXISTS
(
    SELECT *
    FROM parts AS P1
    WHERE EXISTS
    (
        SELECT *
        FROM parts AS P2, shipment AS SP1
        WHERE NOT (P1.STORECITY = 'London')
        AND SP1.PNO = P1.PNO
        AND SP1.SNO = S1.SNO
    )
)
AND NOT EXISTS
(
    SELECT *
    FROM parts AS P3, shipment AS SP2
    WHERE SP2.PNO = P3.PNO
    AND SP2.SNO = S1.SNO
);

```

Output:

Results		Messages
	SNAME	
1	Adams	