

Lab 2

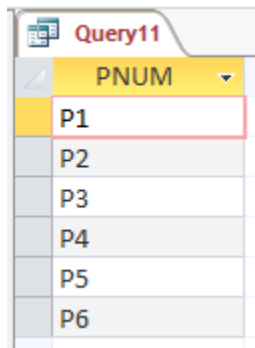
Name : Gandhi , Pritesh

11. Get part numbers for parts shipped to any job by a supplier in the same city as that job.

Query:

```
SELECT DISTINCT SP.PNUM
FROM SHIPMENT AS SP, SUPPLIER AS S, JOB AS J
WHERE SP.SNUM=S.SNUM
AND SP.JNUM=J.JNUM
AND S.CITY=J.CITY;
```

Result:



PNUM
P1
P2
P3
P4
P5
P6

Cardinality:

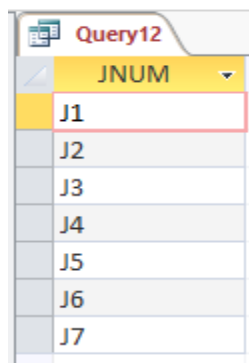
Record: 1 of 6

12. Get job numbers for jobs that receive shipment(s) from at least one supplier not in the same city as that job.

Query:

```
SELECT DISTINCT J.JNUM
FROM JOB AS J, SHIPMENT AS SP, SUPPLIER AS S
WHERE J.JNUM=SP.JNUM
AND S.SNUM=SP.SNUM
AND J.CITY<>S.CITY;
```

Result:



JNUM
J1
J2
J3
J4
J5
J6
J7

Cardinality:

Record: 1 of 7

13. Get all pairs of part numbers such that some supplier ships both the indicated parts.

Query:

```
SELECT DISTINCT SP_FIRST.PNUM AS FIRST_PART, SP_SECOND.PNUM AS SECOND_PART
FROM SHIPMENT AS SP_FIRST, SHIPMENT AS SP_SECOND
WHERE SP_FIRST.SNUM=SP_SECOND.SNUM
AND SP_FIRST.PNUM < SP_SECOND.PNUM;
```

Result:

Query13	
FIRST_PART	SECOND_PA
P1	P2
P1	P3
P1	P4
P1	P5
P1	P6
P2	P3
P2	P4
P2	P5
P2	P6
P3	P4
P3	P5
P3	P6
P4	P5
P4	P6
P5	P6

Cardinality:

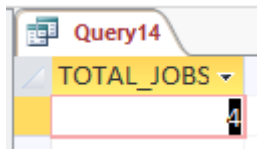
Record: 14 1 of 15

14. Get the total number of jobs that receive shipments from supplier S5.

Query:

```
SELECT COUNT(SP.JNUM) AS TOTAL_JOBS
FROM (SELECT DISTINCT JNUM
      FROM SHIPMENT
      WHERE SNUM='S5') AS SP;
```

Result:



TOTAL_JOBS
4

Cardinality:



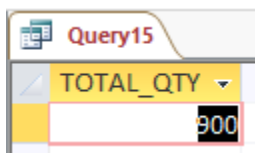
Record: 1 of 1

15. Get the total quantity of part P1 shipped by supplier S1.

Query:

```
SELECT SUM(QTY) AS TOTAL_QTY
FROM SHIPMENT
WHERE PNUM='P1'
AND SNUM='S1';
```

Result:



TOTAL_QTY
900

Cardinality:



Record: 1 of 1

16. For each part being shipped to a job, get the part number, the job number, and the corresponding total quantity.

Query:

```
SELECT SP.PNUM, SP.JNUM, SUM(SP.QTY) AS TOTAL_QTY
FROM SHIPMENT AS SP
GROUP BY SP.PNUM, SP.JNUM;
```

Cardinality:



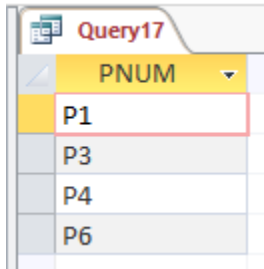
Record: 1 of 21

17. Get part numbers of parts shipped to some job in an average quantity of more than 320.

Query:

```
SELECT SP.PNUM
FROM SHIPMENT AS SP
GROUP BY SP.PNUM
HAVING AVG(SP.QTY)>320;
```

Result:



PNUM
P1
P3
P4
P6

Cardinality:



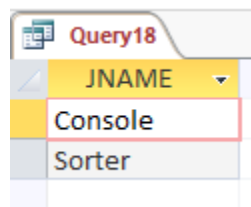
Record: 1 of 4

18. Get job names for jobs that receive shipment(s) from supplier S1.

Query:

```
SELECT DISTINCT J.JNAME
FROM JOB AS J, SHIPMENT AS SP
WHERE J.JNUM=SP.JNUM
AND SP.SNUM='S1';
```

Result:



JNAME
Console
Sorter

Cardinality:



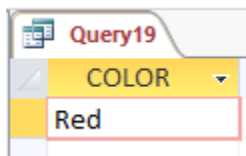
Record: 1 of 2

19. Get colors of parts shipped by supplier S1.

Query:

```
SELECT DISTINCT P.COLOR
FROM SHIPMENT AS SP, PART AS P
WHERE SP.PNUM=P.PNUM
AND SP.SNUM='S1';
```

Result:



COLOR
Red

Cardinality:



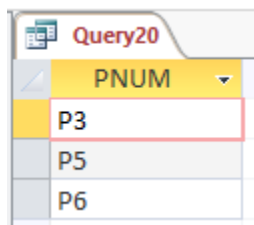
Record: 1 of 1

20. Get part numbers for parts shipped to any job in London.

Query:

```
SELECT DISTINCT P.PNUM
FROM PART AS P, SHIPMENT AS SP, JOB AS J
WHERE P.PNUM=SP.PNUM
AND J.JNUM=SP.JNUM
AND J.CITY='London';
```

Result:



PNUM
P3
P5
P6

Cardinality:



Record: 1 of 3
