**CS630 HW3**

**Q1**



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**Q2**

1. Here there will be two cases:

a = 10 and b can be NULL or can be any integer.

b = 20 and a can be NULL or can be any integer.

1. Here there can only be one tuple. The set must contain exactly the tuple (10, 20).
2. Here the set can be any tuple (a, b) where a can be any integer but not NULL and b can be any integer or it can also be NULL.
3. Here the tuple (a, b) such that a and b both of them cannot be NULL but can be integers.

**Q3**

1. CREATE VIEW ManagerSummary (DeptName, MgrId, MgrName, MgrSalary, EmpCount) AS

SELECT dname, managerid, E.ename, E.salary, COUNT(e.eid)

FROM Employee E, Works W, Department D

WHERE D.managerid = E.eid and D.did = W.did and W.eid = E.eid

GROUP BY D.did, D.dname, D.managerid, E.ename, E.salary;

1. SELECT DISTINCT M.MgrSalary

FROM ManagerSummary M

WHERE M.DeptName = ‘Sales’;

1. SELECT M.MgrName

FROM ManagerSummary M

WHERE M.EmpCount = (SELECT MAX(M1.EmpCount) FROM ManagerSummary M1);