Database Assignment 2  
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--1. List the part number for every part that is shipped by more than one supplier.

select distinct s1.P# from Shipments s1 join

Shipments s2 on s1.P#=s2.P# and s1.S# <> s2.S#;

--2. Find the average weight of all parts.

SELECT AVG(weight) AS average\_weight

FROM Part;

--3. For each part list the part number and the total quantity

--in which that part is shipped and order the results in descending order of the

--total quantity shipped. Name the total quantity shipped in the result as total Shipped.

select shipments.P#,Sum(QTY) as Total\_Shipped from shipments

group by P#

order by Total\_Shipped desc

--4. List only the names of those suppliers who ship a part that weighs more than 200.

select sname from Supplier join shipments on Supplier.s#=Shipments.S# join

part on Shipments.P#=part.part\_id

where part.weight>200

--5. List the names of those cities in which both a supplier and

--a job are located.

select distinct Supplier.City from Supplier join jobs

on Supplier.city=jobs.City

--6. List the names of those jobs that receive a shipment from supplier number S1.

select jobs.JName from jobs join

Shipments on jobs.J#=Shipments.J# join

Supplier on Supplier.s#=Shipments.S#

--7. List the names of those parts that are not shipped to any job.

select part.part\_name from part left join

shipments on Part.part\_id=Shipments.P#

where Shipments.P# is null

--8. List the names of those suppliers who ship part number P2 to any job.

select supplier.SName from Supplier join Shipments on Supplier.s#=Shipments.S#

where Shipments.P#='P2'

--9. List the names of those suppliers who ship part at least one red part to any job.

select Supplier.SName from Supplier join Shipments on Supplier.s#=Shipments.S# join

part on Shipments.P#=part.part\_id

group by p#,color,Supplier.SName

having color='Red'

--10.List the part number for every part that is shipped more than once

--(the part must be shipped more than one time).

select shipments.P# from Shipments

group by P#

having count(p#)>1

**Q2**--1. find the name (first\_name, last\_name) and the salary of the employees who have a higher

--salary than the employee whose last\_name=‘Bull’

select Employee.FIRST\_NAME,Employee.LAST\_NAME,Employee.SALARY from Employee

where Employee.SALARY>(Select SALARY from Employee where LAST\_NAME='Bull')

--2. find the name (first\_name, last\_name) of all employees who works in the IT department.

select Employee.FIRST\_NAME,Employee.LAST\_NAME,Employee.SALARY from Employee join

Department on Employee.DEPARTMENT\_ID=Department.DEPARTMENT\_ID

group by Department.DEPARTMENT\_ID,Employee.FIRST\_NAME,Employee.LAST\_NAME,Employee.SALARY,DEPARTMENT\_NAME

having Department.DEPARTMENT\_NAME='IT'

--3 find the name (first\_name, last\_name) of the employees who have a manager and worked

--in a USA based department.

select Employee.FIRST\_NAME,Employee.LAST\_NAME,Employee.SALARY from Employee join

Department on Employee.DEPARTMENT\_ID=Department.DEPARTMENT\_ID join

Location on Department.LOCATION\_ID=Location.LOCATION\_ID

where Employee.MANAGER\_ID<>0 and Location.COUNTRY\_ID='US'

--4 find those employees who earn more than the average salary. Return employee ID, first name,

--last name.

select Employee.FIRST\_NAME,Employee.LAST\_NAME,Employee.EMPLOYEE\_ID,AVG(Salary) as Average\_Salary

from Employee

group by Employee.FIRST\_NAME,Employee.LAST\_NAME,Employee.EMPLOYEE\_ID,SALARY

having SALARY>AVG(Salary)

--5. find those employees whose department is located at ‘Toronto’. Return first name, last

--name, employee ID, job ID.

select Employee.FIRST\_NAME,Employee.LAST\_NAME,Employee.EMPLOYEE\_ID from Employee join

Department on Employee.DEPARTMENT\_ID=Department.DEPARTMENT\_ID join

Location on Department.LOCATION\_ID=Location.LOCATION\_ID

where Location.CITY='Toronto'

--6. find those employees who report to that manager whose first name is ‘Payam’. Return first

--name, last name, employee ID and salary

select Employee.FIRST\_NAME,Employee.LAST\_NAME,Employee.EMPLOYEE\_ID from Employee

where Employee.manager\_id = ( select Employee.EMPLOYEE\_ID from employee where Employee.FIRST\_NAME='Payam')

--7. find all those departments where at least one employee is employed. Return department name

select Distinct Department.DEPARTMENT\_NAME from Employee right join

Department on Employee.DEPARTMENT\_ID=Department.DEPARTMENT\_ID

--8. find those employees who do not work in the departments where managers’ IDs are

--between 100 and 200 (Begin and end values are included.). Return all the fields of the

--employees

select \* from employee join

Department on Employee.DEPARTMENT\_ID=Department.DEPARTMENT\_ID where

Department.MANAGER\_ID not between 100 and 200

--9. From the following table, find those employees whose salary matches the lowest salary of

--any of the departments. Return first name, last name and department ID.

select top 1 Employee.FIRST\_NAME,Employee.LAST\_NAME,min(salary) as Minimum\_Salary,Employee.DEPARTMENT\_ID from Employee

group by Employee.FIRST\_NAME,Employee.LAST\_NAME,SALARY,Employee.DEPARTMENT\_ID

order by min(SALARY) asc

--10.find the name (first\_name, last\_name) of the employees who are managers.

select Employee.FIRST\_NAME,Employee.LAST\_NAME from Employee where EMPLOYEE\_ID in

(Select MANAGER\_ID from Employee)

--11.find those employees whose salary is lower than that of employees whose job title is

--"MK\_MAN". Exclude employees of Job title ‘MK\_MAN’. Return employee ID, first name,

--last name, job ID

select Employee.EMPLOYEE\_ID, Employee.FIRST\_NAME,Employee.LAST\_NAME,Employee.JOB\_ID from Employee join

Jobs on Employee.JOB\_ID=Jobs.JOB\_ID where Jobs.JOB\_TITLE='MK\_MAN'

--12.Find the name (first\_name, last\_name), and salary of the employees whose salary is

--greater than the average salary

select Employee.EMPLOYEE\_ID, Employee.FIRST\_NAME,Employee.LAST\_NAME,Employee.SALARY from Employee

where SALARY>(select avg(salary) from Employee as Average\_Salary)

--13.Find the name (first\_name, last\_name), and salary of the employees whose salary is equal

--to the minimum salary for their job grade.

select Employee.FIRST\_NAME,Employee.LAST\_NAME,Employee.SALARY from Employee

where SALARY=(select min(salary) from Employee as Minimum\_Salary)

--14.Find the name (first\_name, last\_name), and salary of the employees who earns

--more than the average salary and works in any of the IT departments.

select Employee.FIRST\_NAME,Employee.LAST\_NAME,Employee.SALARY from Employee

where SALARY>(select avg(salary) from Employee as Average\_Salary join Department on Employee.DEPARTMENT\_ID=Department.DEPARTMENT\_ID where Department.DEPARTMENT\_NAME='IT')

--15. Find the name (first\_name, last\_name), and salary of the employees who

--earns more than the earning of Mr. Bell.

select Employee.FIRST\_NAME,Employee.LAST\_NAME,Employee.SALARY from Employee

where SALARY>(select salary from Employee where Employee.LAST\_NAME='Bell')

--16.Find the name (first\_name, last\_name), and salary of the employees who earn the

--same salary as the minimum salary for all departments.

select Employee.FIRST\_NAME,Employee.LAST\_NAME,Employee.SALARY from Employee

where SALARY=(select min(salary) from Employee )

--17.Find the name (first\_name, last\_name), and salary of the employees whose salary is

--greater than the average salary of all departments.

select Employee.FIRST\_NAME,Employee.LAST\_NAME,Employee.SALARY from Employee

where SALARY>(select avg(salary) from Employee )

--18.Find the 3rd maximum salary in the employees table.

select distinct top 1 Employee.SALARY from Employee where SALARY<

(select distinct max(Employee.SALARY) from Employee where SALARY<

(select distinct max(Employee.SALARY) from Employee))

order by SALARY desc