**SQL Assignments Set 1**

**Instructions:**

* Questions are based on the tables of “Demo Database and Tables Script” text file. Ensure that those tables are present with the default records.
* The outputs (or screen shots) shown are as per some other editors of some other databases. The format of your output can differ & in some cases sequence of records also can differ.
* For some questions, you need to execute the associated scripts which will create the table and populate records in it.

1. Display the records of job clerk and manager for deptno 20.

**select \* from emp**

**where (job='Clerk' or job='manager') and DEPTNO = 20**

1. Display the records for the employees, which have the last character as R or H in their name.

**select \* from emp**

**where ENAME like '%R' or ENAME like '%H'**

1. Display the records for the employees earning sal less than 1000 and there is no comm provided.

**select \* from emp**

**where SAL < 1000 and COMM is not Null**

1. Produce the following output:

Details

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SMITH is from the deptno 20, earns salary 800

ALLEN is from the deptno 30, earns salary 1600

WARD is from the deptno 30, earns salary 1250

JONES is from the deptno 20, earns salary 2975

MARTIN is from the deptno 30, earns salary 1250

BLAKE is from the deptno 30, earns salary 2850

CLARK is from the deptno 10, earns salary 2450

SCOTT is from the deptno 20, earns salary 3000

KING is from the deptno 10, earns salary 5000

TURNER is from the deptno 30, earns salary 1500

ADAMS is from the deptno 20, earns salary 1100

JAMES is from the deptno 30, earns salary 950

FORD is from the deptno 20, earns salary 3000

MILLER is from the deptno 10, earns salary 1300

**select ENAME+' is from the DEPTNO '+cast(DEPTNO as varchar)+', earns salary '+cast(SAL as varchar)**

**from EMP**

1. Display the ename, sal, comm, sal+comm. For the null value of commission 10% of sal should be used.

**select ENAME, SAL, COMM, SAL + isNull(COMM, sal \* 0.1)**

**from EMP**

1. Display the names, sal, job, deptno and raise in the salary.

The raise is to be given under following scenarios –

1. Employees from deptno 20 from job Clerk should get 30% raise in their salary.
2. Employees from deptno 20 from job Analyst should get 50% raise in their salary.
3. Employees from deptno 30 from job Manager should get 60% raise in their salary.
4. Employees from deptno 30 from job Salesman should get 70% raise in their salary.
5. Employees from deptno 10 from job Clerk should get 10% raise in their salary.
6. The remaining employees should get the raise of 500.

The output should be in the following format

ENAME SAL JOB DEPTNO RAISED SALARY

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SMITH 800 CLERK 20 1040

ALLEN 1600 SALESMAN 30 2720

WARD 1250 SALESMAN 30 2125

JONES 2975 MANAGER 20 500

MARTIN 1250 SALESMAN 30 2125

BLAKE 2850 MANAGER 30 4560

CLARK 2450 MANAGER 10 500

SCOTT 3000 ANALYST 20 4500

KING 5000 PRESIDENT 10 500

TURNER 1500 SALESMAN 30 2550

ADAMS 1100 CLERK 20 1430

JAMES 950 CLERK 30 500

FORD 3000 ANALYST 20 4500

MILLER 1300 CLERK 10 1430

**select ENAME, SAL, JOB, DEPTNO, case**

**when deptno = 20 and job = 'Clerk' then sal+sal\*0.3**

**when deptno = 20 and job = 'Analyst' then sal+sal\*0.5**

**when deptno = 30 and job = 'Manager' then sal+sal\*0.6**

**when deptno = 30 and job = 'Salesman' then sal+sal\*0.7**

**when deptno = 10 and job = 'Clerk' then sal+sal\*0.1**

**else sal + 500**

**end as 'Raised salary'**

**from EMP**

1. Display the records of employees from the job Clerk earning salary above 1000 as well as all Managers earning salary above 2900.

**select \* from EMP**

**where (JOB = 'Clerk' and SAL >1000)**

**or (JOB = 'Manager' and SAL >2900)**

1. Display the following type of report

**ENAME SAL COMM Commission Status**

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SMITH 800 Commission is not provided

ALLEN 1600 300 Commission is provided

WARD 1250 500 Commission is provided

JONES 2975 Commission is not provided

MARTIN 1250 1400 Commission is provided

BLAKE 2850 Commission is not provided

CLARK 2450 Commission is not provided

SCOTT 3000 Commission is not provided

KING 5000 Commission is not provided

TURNER 1500 0 Commission is not provided

ADAMS 1100 Commission is not provided

JAMES 950 Commission is not provided

FORD 3000 Commission is not provided

MILLER 1300 Commission is not provided

**select ENAME, SAL, COMM, case**

**when COMM is null or comm = 0 then 'Commission is not provided'**

**else 'Commission is provided'**

**end as 'Commission Status'**

**from EMP**

1. Display the records sorted as per the job. Make sure that within each job the records are sorted as per the highest to lowest commissions.

**select \* from EMP**

**order by JOB,COMM desc**

1. Display name, salary, 30% of salary as tax and salary – tax as take home salary for records of employee table working in deptno 20.

**select ENAME, SAL, SAL\*0.3 as "Tax and Salary"**

**from EMP**

**where DEPTNO = 20**

1. Execute the following script:

create table Asia

(TrID Integer **Not** **Null**,

Country Varchar(20) **Not** **Null**,

PName Varchar(40),

Amount Integer **Not** **Null**,

DOT Date)**;**

**Insert** **into** Asia **Values**(1,'India','Laptop', 25000, '2017-03-17')**;**

**Insert** **into** Asia **Values**(2,'India','Mobile', 10000, '2018-02-21')**;**

**Insert** **into** Asia **Values**(3,'China','Laptop',15000 , '2017-10-04')**;**

**Insert** **into** Asia **Values**(4,'China','Mobile',80000 , '2018-01-10')**;**

**Insert** **into** Asia **Values**(5,'Singapore','Laptop',90000 , '2017-07-11')**;**

**Insert** **into** Asia **Values**(6,'Singapore','Mobile',18000 , '2018-02-25')**;**

**Insert** **into** Asia **Values**(7,'Malaysia','Laptop',12000 , '2017-05-29')**;**

**Insert** **into** Asia **Values**(8,'Malaysia','Mobile',28000 , '2018-03-19')**;**

**Insert** **into** Asia **Values**(9,'India','Laptop', 14000, '2017-04-11')**;**

**Insert** **into** Asia **Values**(10,'India','Mobile', 70000, '2018-03-24')**;**

**Insert** **into** Asia **Values**(11,'China','Laptop',25000 , '2017-10-06')**;**

**Insert** **into** Asia **Values**(12,'China','Mobile',19000 , '2018-01-15')**;**

**Insert** **into** Asia **Values**(13,'Singapore','Laptop',100000 , '2017-06-14')**;**

**Insert** **into** Asia **Values**(14,'Singapore','Mobile',35000 , '2018-02-27')**;**

**Insert** **into** Asia **Values**(15,'Malaysia','Laptop',43000 , '2017-08-21')**;**

**Insert** **into** Asia **Values**(16,'Malaysia','Mobile',45000 , '2018-03-19')**;**

Question 🡪 Display India records of year 2018 of Amount > 15000, China records of year 2018 of Amount < 20000, Singapore records of year 2018 of Amount > 30000 and Malaysia records of year 2018 of Amount > 40000.

**select \* from Asia**

**where (YEAR(dot) = ‘2018’**

**and Country = 'India' and amount >15000)**

**or (YEAR(dot) = ‘2018’**

**and Country = 'China' and amount < 20000)**

**or (YEAR(dot) = ‘2018’**

**and Country = 'Malaysia' and amount >40000)**

1. Display records from emp table of all Salesman from deptno 20 only.

**select \* from EMP**

**where JOB = 'Salesman'**

**and DEPTNO = 20**

1. Display records from emp table of all those employees who are not reporting to anyone.

**select \* from EMP**

**where MGR is Null**

1. Display records from emp table of those employees who are earning salary less than or equal to 2000. Records should be sorted as per deptno, and within deptno as per their salaries highest to lowest.

**select \* from EMP**

**where SAL <= 2000**

**order by DEPTNO, SAL desc**

1. Display Name, Salary, Commission and Total as Salary + 30% of Commission for all those employees whose difference between Salary and Commission is less than or equal to 1200.

**select ENAME, SAL, COMM, SAL+COMM\*0.3 as "Total"**

**from EMP**

**where SAL-COMM <= 1200**