

Sl. No.	Assignment I
1.	Select all information from SALGRADE table.
ANS	SELECT * FROM SALGRADE;
2.	Select all information from EMP table.
ANS	SELECT * FROM EMP;
3.	List all employees who have a salary between 1000 to 2000
ANS	SELECT ENAME, DEPTNO, SAL FROM EMP WHERE SAL BETWEEN 100 AND 2000;
4.	List department numbers and names in department name order.
ANS	SELECT DEPTNO, DNAME FROM DEPT ORDER BY DNAME;
5.	Display all the different job types.
ANS	SELECT DISTINCT JOB FROM EMP;
6.	List the details of the employees in departments 10 and 20 in alphabetical order
ANS	SELECT * FROM EMP WHERE DEPTNO IN(10,20) ORDER BY ENAME;
7.	List names and jobs of all clerks in department 20.
ANS	SELECT ENAME, JOB FROM EMP WHERE JOB='CLERK' AND DEPTNO=20;
8.	Display all employees' names, which have TH or LL in them.
ANS	SELECT ENAME FROM EMP WHERE ENAME LIKE '%TH%' OR ENAME LIKE '%LL%';
9	List following details for all employees who have a manager.
ANS	SELECT ENAME, JOB, SAL FROM EMP WHERE MGR IS NOT NULL;
10	Display name and total remuneration for all employees.
ANS	SELECT ENAME, SAL*12+NVL(COMM,0) RENUNERATION FROM EMP;
11.	Display all employees who were hired during 1983.
ANS	SELECT ENAME, DEPTNO, HIREDATE FROM EMP WHERE HIREDATE LIKE '%83%';
12.	Display name, annual salary and commission of all sales people whose monthly salary is greater than their commission. The output should be ordered by salary , highest first. If two or more employees have the same salary sort by employee name, within the highest salary order.
ANS	SELECT ENAME, SAL*12 ANNUAL SAL, COMM FROM EMP WHERE SAL>COMM AND JOB='SALESMAN' ORDER BY SAL DESC,ENAME;

Sl. No.	Assignment II
1.	Generate a statement which prompts the user at runtime. The intension is to display employees hired between 2 given dates. Run the query twice. Modify the query to use a double ampersand variable. Run the query a number of the difference.
ANS	SELECT ENAME, HIREDATE FROM EMP WHERE HIREDATE BETWEEN '&FIRST_DATE' AND '&LAST_DATE';
2.	Develop a query that will accept a given job title. Execute the query a number of times to test.
ANS	SELECT ENAME, JOB, SAL, MGR, DEPTNO FROM EMP WHERE JOB='&JOB';
3.	Define a variable representing the expression used to calculate an employee's total annual remuneration. Use the variable in a statement which finds all employees who earn \$30000 a year or more.
ANS	DEFINE REM='SAL*12+NVL(COMM,0)' SELECT ENAME, &REM FROM EMP WHERE &REM>30000;
4.	List the employee name and salary increased by 15% and expressed as a whole number of dollars.
ANS	SELECT DEPTNO, ENAME, ROUND(SAL *1.15) PCTSAL FROM EMP;
5.	List all employees names and their jobs as heading "EMPLOYEE AND JOB"
ANS	SELECT RPAD(ENAME,10) LPAD(JOB,10) EMPLOYEE_AND_JOB FROM EMP;
6.	List all employee names and jobs as following format SMITH (Clerk)
ANS	SELECT ENAME '(' INITCAP(JOB) ')' EMPLOYEE FROM EMP;
7.	Do a case insensitive search for a list of employees with a job that the user enters.
ANS	SELECT * FROM EMP WHERE UPPER(JOB) = UPPER('&JOB');
8.	It had been discovered that the sales people in department 30 are not all male. List all male employees name and job of that department.
	SELECT ENAME, DEPTNO,INITCAP(REPLACE(JOB,'SALSEMAN','SALSEPERSON')) JOB FROM EMP WHERE DEPTNO=30;
Sl. No.	Assignment III
1.	Display each employee's name and hire date from dept 20. Make sure that you specify the alias 'DATE_HIRED' after your expression otherwise the formatted column will wrap; it uses a width of 80 characters is the default for character columns.
ANS	SELECT ENAME TO_CHAR(HIREDATE,'fmMonth, Ddspth YYYY') date_hired FROM EMP WHERE DEPTNO=20;

2.	Display each employee name with hire date and salary review date. Assume review date is one year after hire date. Order the output in ascending review date order.
	SELECT ENAME, HIREDATE, ADD_MONTHS(HIREDATE,12) REVIEW FROM EMP ORDER BY ADD_MONTHS(hiredate,12);
3.	Print list of employees displaying just salary that more than 1500. if exactly 1500 display 'On Target', if less than 1500 display 'below 1500'
ANS	SELECT ENAME, DECODE(SIGN(500-SAL),1,'BELOW 1500',0,'On Target',SAL) SALARY FROM EMP ORDER BY ENAME;
4.	Write a query, which will return the DAY of the week (i.e. MONDAY), for any date entered in the format: DD.MM.YY
ANS	SELECT TO_CHAR(TO_DATE('&ANYDATE','DD.MM.YY'),'DAY') DAY FROM SYS.DUAL;
5.	Write a query to calculate the length of time any employee has been with the company. Use DEFINE to avoid repetitive typing of functions.
ANS	DEFINE TIME=MONTH_BETWEEN(SYSDATE,HIREDATE) FROM ENAME, FLOOR(&TIME/12) ' YEARS ' FLOOR(MOD(&TIME,12)) ' MONTHS' "LENGTH OF SERVICE" FROM EMP WHERE ENAME=UPPER('&EMPLOYEE NAME');
6.	Given a string of the format 'nn / nn', verify that the first and last 2 characters are numbers, and that the middle character is a '/' . Print the expression 'YES' if valid, 'NO' if not valid. Use the following values to test your solution '12/24', '01/1a', and '99\88'.
ANS	SELECT '12/34' VALUE, DECODE(TRANSLATE('12/ 34','1234567890','9999999999'),'99/99','YES','NO') "VALID?" FROM SYS.DUAL;
7.	Employees hired on or before the 15 th of any month are paid on the last Friday of that month. Those hired after the 15 th are paid the last Friday of the following month. Print a list of employees, their hire date and first pay date. Sort on hire date.
ANS	SELECT ENAME, HIREDATE, NEXT_DAY(LAST_DAY(ROUND(HIREDATE,'MONTH'))-7 'FRIDAY') PAYDAY FROM EMP ORDER BY HIREDATE;
8.	List all employees names, and their average salary group by their respective department.

Sl. No.	Assignment IV
1.	Find minimum salary of all employees
ANS	SELECT MIN(SAL) MINIMUM FROM EMP;
2.	Find minimum, maximum and average salaries of all employees

ANS	SELECT MAX(SAL), MIN(SAL), AVG(SAL) FROM EMP;
3.	List the minimum and maximum salary for each job type.
ANS	SELECT JOB, MAX(SAL) MAXIMUM, MIN(SAL) MINIMUM FROM EMP GROUP BY JOB;
4.	Find out how many managers there are without listing them.
ANS	SELECT COUNT(*) MANAGERS FROM EMP WHERE JOB='MANAGER';
5.	Find average salary and average total remuneration for each job type remember salesman earn commission.
ANS	SELECT JOB,AVG(SAL) AVSAL,AVG(SAL*12+NVL(COMM,0)) AVCOMP FROM EMP GROUP BY JOB;
6.	Find the difference between highest and lowest salaries.
ANS	SELECT MAX(SAL)-MIN(SAL) DIFFERENCE FROM EMP;
7.	Find all departments which have more than 3 employees
ANS	SELECT, DEPTNO,COUNT(*) FROM EMP GROUP BY DEPTNO HAVING COUNT(*)>3;
9.	List lowest paid employees working for each manager. Exclude any groups where the minimum salary is less than 1000. Sort the output by salary.
ANS	SELECT MGR,MIN(SAL) FROM EMP GROUP BY MGR HAVING MIN(SAL)>=1000 ORDER BY MIN(SAL);
10.	Display all employee names and their department name, in department name order.
ANS	SELECT ENAME,DNAME FROM EMP,DEPT WHERE EMP.DEPTNO=DEPT.DEPTNO;

Sl. No.	Assignment V
1.	Display all names, department number and name.
ANS	SELECT ENAME,E.DEPTNO,DNAME FROM EMP E , DEPT D WHERE E.DEPTNO=D.DEPTNO;
2.	Display the name, location , and department of employees whose salary is more than 1500 a month.
ANS	SELECT ENAME, LOC LOCATION, DNAME FROM EMP, DEPT WHERE EMP.DEPTNO=DEPT.DEPTNO AND SAL>1500;
3.	Produce a list showing employees salary grades.
ANS	SELECT ENAME, JOB, SAL, GRADE FROM EMP, SALGRADE WHERE SAL BETWEEN LOSAL AND HISAL;
4.	Show only employees on grade 3.
ANS	SELECT ENAME, JOB, SAL, GRADE FROM EMP, SALGRADE WHERE SAL 'BETWEEN LOSAL AND HISAL AND GRADE=3;
5.	Show all employees in Dallas.
ANS	SELECT ENAME, SAL, LOC LOCATION FROM EMP, DEPT WHERE EMP.DEPTNO=DEPT.DEPTNO AND LOC='DALLAS';
6.	List the employee name, job, salary, grade and department name for everyone in the company except clerks, sort on salary, displaying the highest salary first
ANS	SELECT ENAME, JOB, SAL, GRADE, DNAME FROM EMP, SALGRADE, DEPT WHERE EMP.DEPTNO=DEPT.DEPTNO AND SAL BETWEEN LOSAL AND HISAL AND JOB !='CLERK' ORDER BY SAL DESC;
7.	List the following details for employees who earn \$36000 a year or who are clerks.
ANS	SELECT ENAME, JOB, SAL*12 ANNUAL_SAL, D.DEPTNO, DNAME, GRADE, FROM EMP E, SALGRADE, DEPT D WHERE E.DEPTNO=D.DEPTNO AND SAL BETWEEN LOSAL AND HISAL AND (SAL*12+NVL(COMM,0)=36000 OR E.JOB='CLERK') ORDER BY E.JOB;
8.	List all employees by name and number along with their manager name and number.
ANS	SELECT D.DEPTNO, DNAME FROM EMP E, DEPT D WHERE E.DEPTNO(+)=D.DEPTNO AND E.EMPNO IS NULL;
9.	Find all employees who joined the company before their manager.
ANS	SELECT E.ENAME EMPLOYEE, H.HIREDATE, M.ENAME MANAGER, M.HIREDATE FROM EMP E, EMP M WHERE E.MGR=M.EMPNO AND E.HIREDATE < M.HIREDATE;

Assignment VI

1. Select deptno, ename , hiredate from emp
Where (sal, job) in (select min(sal), job from emp group by job)
Order by sal;
2. Select deptno, dname from dept D
Where not exists (select 'anything' from emp where deptno = d.deptno);
3. Define rem = sal * 12 + nvl(comm., 0)
Select deptno, sum(&rem) COMPENSATION from emp
Group by deptno
Having sum(&rem) = (select Max(sum(&rem)) from emp group by deptno);
4. Select ename, sal from emp e
Where 3 > (select count(*) from emp where e.sal < sal);
5. Select To+char(hiredate, 'YYYY') YEAR, count(empno) NUMBER_OF_EMPS
from emp
Group by TO_CHAR(hiredate, 'YYYY') having count(empno) = (Select
Max(count(empno)) from emp
Group by TO_CHAR(hiredate, 'YYYY'));