**LAB CYCLE 1**

***QUESTION SET 1***

1. Create an employee table ‘EMP’ with following fields :

empno                NUMBER(2)

ename                 VARCHAR2(25)

job                   VARCHAR2(12)

salary                 NUMBER(10,2)

commission              NUMBER(7,2)

deptno                 NUMBER(2)

1. Display the structure of ‘EMP’
2. Insert the following record into ‘EMP’

**EMPNO ENAME JOB SAL COMM DEPTNO**

7369 SMITH CLERK 800 20

1. Insert the rest of records using substitution variable.

**EMPNO ENAME JOB SAL COMM DEPTNO**

7499 ALLEN SALESMAN 1600 300 30

7521 WARD SALESMAN 1250 500 30

7566 JONES MANAGER 2975 20

7654 MARTIN SALESMAN 1250 1400 30

7698 BLAKE MANAGER 2850 30

7782 CLARK MANAGER 2450 10

7788 SCOTT ANALYST 3000 20

7839 KING PRESIDENT 5000 10

7844 TURNER SALESMAN 1500 30

7876 ADAMS CLERK 1100 20

7900 JAMES NULL 950 30

1. FORD ANALYST 3000 20

7934 MILLER CLERK 1300 10

1. Insert job as ‘CLERK’ for all ‘NULL’ job types.
2. Add a new field ‘date\_join’ with following values

**date\_join**

17-DEC-80

20-FEB-81

22-FEB-81

02-APR-81

28-SEP-81

01-MAY-81

09-JUN-81

19-APR-87

17-NOV-81

08-SEP-81

23-MAY-87

03-DEC-81

03-DEC-81

23-JAN-82

1. Display details of all employees.
2. Display all the distinct job types in ‘EMP’.
3. Display names of all employees in dept 20 and 30
4. List name and Total of salary i.e sal+commission
5. List name and Annual Salary i.e sal\*12
6. List the employee who joined in the date ‘03-DEC-81’
7. Display the total salary of ‘Miller’
8. Delete the employee ‘Miller’ from’EMP’
9. Display name and deptno of all employees.
10. Remove the field ‘commission’ fom’EMP’ after updating salary with total salary, i.e sal+commission
11. Display the name of employees having the same amount of salary **( don’t use subqueries**)
12. Display the name and employee no as ‘name’ and ‘emp\_id’
13. Rename table ‘EMP’ to ‘EMPLOYEE’
14. Create a new table ‘EMP\_TAB’ from table ‘EMPLOYEE’
15. List all the details of ‘EMPLOYEE’ and ‘EMP\_TAB’
16. Delete all records from ‘EMP’
17. Delete the table ‘EMP’

***QUESTION SET 2***

Create a table STUDENT with fields sid, name, dob (date of birth) and marks of 3 subjects ( physics, chemistry and maths ). Add the details of 5 students. Perform the following queries:

1. Display the id and name of youngest student.
2. Display the details of students who have passed in maths and either in physics or chemistry.(pass mark = 40 marks and above)
3. Add two more columns total and average.
4. Display the name of student who scored highest marks in maths.
5. Display the name of student who scored least marks in chemistry.
6. Update column total with total marks.
7. Display details of students in order of total merit.
8. Rename the column average with avg\_mark
9. Find out the overall average of class.
10. Display details of students whose average is greater than overall average.
11. Find the total no: of students whose average is greater than overall average.

***QUESTION SET 3***

Create the Table LOAN\_ACCOUNTS with the structure given below

|  |  |  |
| --- | --- | --- |
| Field Name | Data Type | Length |
| Accno | CHAR | 4 |
| Cust\_name | VARCHAR2 | 15 |
| Loan\_Amount | NUMBER | 7 digits and 2 decimal places |
| Installments | NUMBER |  |
| int\_rate | NUMBER | 2 digits and 2 decimal places |
| Start\_date | DATE |  |
| Interest | NUMBER | 7 digits and 2 decimal places |

Add another column ‘category’ of type varchar2(1) in the Loan Table.

Insert the following details into the table

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Accno | Cust\_name | Loan\_Amount | Installments | int\_rate | Start\_date | Interest |
| 1001 | R.K Gupta | 300,000.00 | 36 | 12.00 | July 19, 2009 |  |
| 1002 | S.P Sharma | 500,000.00 | 48 | 10.00 | March 22, 2008 |  |
| 1003 | K.P Jain | 300,000.00 | 36 | NULL | August 3, 2007 |  |
| 1004 | M.P Yadav | 800,000.00 | 60 | 10.00 | June 12, 2008 |  |
| 1005 | S.P Sinha | 200,000.00 | 36 | 12.50 | March 1, 2010 |  |
| 1006 | P. Sharma | 700,000.00 | 60 | 12.50 | May 6, 2008 |  |
| 1007 | K.S Dhall | 500,000.00 | 48 | NULL | May 3, 2008 |  |

1. Put the interest rate 11.50% for all the loans for which the interest rate is NULL.
2. Increase the interest rate by 0.5% for all the Loans for which the Loan amount is more than 400000.
3. For each Loan replace Interest with (Loan\_amount \* Int\_rate\* installments)/(12\*100).
4. Delete the records of all the Loans whose start date is before 2008.
5. Delete the records of all the Loans whose name starts with ‘K’
6. Display the details of all the Loans with less than 40 installments.
7. Display the Accno and Loan\_amount of all the loans started before 01-04-2009.
8. Display the int\_rate of all Loans started after 01-04-2009.
9. Display the Accno, cust\_name and Loan amount for all the Loans for which the cust\_name ends with‘Sharma’.
10. Loan\_Amount of all the Loans for which the Cust\_name ends with ‘a’.
11. Display the Accno, Cust\_name and Loan\_Amount for the Loans for which the Cust\_name contains ‘a’.
12. Dsiplay the Accno, Cust\_name and Loan\_Amount for all the Loans for which the Cust\_name does not contain ‘P’.
13. Display the structure of table LOAN\_ACCOUNTS so that you can verify that the table is created as required.
14. Display the details of all the loans in the ascending order of their Loan\_Amount.
15. Display the details of all the Loans in the descending order of their Start\_date.
16. Display the details of all the Loans in the ascending order of their Loan\_amount and within Loan\_amount in the descending order of their Start\_date.
17. Display the Accno, Cust\_name and Loan\_Amount of all the Loans for which the Cust\_name starts with ‘K’.
18. Display the details of all the Loans whose rate of interest in NULL.
19. Display the details of all the loans whose rate of interest is not NULL.
20. Display the amounts of various loans from the table Loan\_Accounts. A Loan\_Amount should appear only once.
21. Display the details of all the loans started after 31-12-2008 for which the number of installments are more than 36.
22. Display the Customer\_name and Loan\_amount for all the Loans for which the Loan amount is less than 500000 or int\_rate is more than 12.
23. Display the details of all Loans which started in the year 2009.
24. Display the details of all the Loans whose Loan amount is in the Range 400000 to 500000.
25. Display the Customer\_name and Loan\_amount of all the Loans for which the number of installments are 26, 36 and 48.
26. Display the customer name, loan\_amount and interest rate. If interest rate is NULL, display it as 0.
27. Display the customer name, loan\_amount and interest rate. If interest rate is NULL, display it as “No Interest”.