**Queries**

1. **Write CREATE TABLE statements for the above tables with all appropriate constraints. Enter a broad range of data in the tables.**

**RESULT: -**

create table AC\_MAST(

-> AC\_TYPE VARCHAR(3),

-> AC\_NO INT(4),

-> CUST\_NO INT(5),

-> BAL FLOAT(10),

-> OD\_LIMIT FLOAT(10),

-> CONSTRAINT AM\_AC\_MAST PRIMARY KEY (AC\_TYPE,AC\_NO)

-> );

Query OK, 0 rows affected (0.83 sec)

create table CUST\_MAST(

-> CUST\_NO INT(5) PRIMARY KEY,

-> NAME VARCHAR(50),

-> ADDR1 VARCHAR(50),

-> ADDR2 VARCHAR(50),

-> ADDR3 VARCHAR(50),

-> CITY VARCHAR(30),

-> STATE VARCHAR(20)

-> );

Query OK, 0 rows affected (0.27 sec)

create table TRANS(

-> AC\_TYPE VARCHAR(3),

-> AC\_NO INT(4),

-> TDATE DATE,

-> COUNTER INT(2),

-> AMOUNT FLOAT(10),

-> CONSTRAINT TR\_TRANS PRIMARY KEY (AC\_TYPE,AC\_NO,TDATE)

-> );

Query OK, 0 rows affected (0.31 sec)

create table DEPT(

-> DNO INT(3) PRIMARY KEY,

-> NAME VARCHAR(15),

-> LOC VARCHAR(20)

-> );

Query OK, 0 rows affected (0.41 sec)

CREATE TABLE EMP(

-> EMPNO INT(5) PRIMARY KEY,

-> NAME VARCHAR(50),

-> JDATE DATE,

-> DEPT INT(3),

-> DESIG VARCHAR(20),

-> BASIC FLOAT(10,2),

-> DA FLOAT(10,2),

-> HRA FLOAT(10,2),

-> PF FLOAT(10,2),

-> IT FLOAT(10,2)

-> );

Query OK, 0 rows affected (0.27 sec)

1. **Write a SELECT statement to display employee number, name, department number, designation, basic for all employees.**

**RESULT:** SELECT EMPNO,NAME,DEPT,DESIG,BASIC FROM EMP;

+-------+-----------------+------+----------------------+----------+

| EMPNO | NAME | DEPT | DESIG | BASIC |

+-------+-----------------+------+----------------------+----------+

| 21772 | Trenna Wallege | 4 | Paralegal | 71648.57 |

| 33179 | Lucita Peachman | 5 | Graphic Designer | 50049.46 |

| 35523 | Bryan Trow | 9 | Geological Engineer | 16934.63 |

| 36724 | Jonah Cornbell | 10 | Social Worker | 33975.51 |

| 40413 | Shaine Rickersy | 13 | Account Coordinator | 61107.13 |

| 40763 | Selena Holt | 6 | Chief Design Enginee | 38339.97 |

| 68475 | Lind Ebbitt | 8 | Software Test Engine | 91676.51 |

| 68917 | Lisle Slane | 12 | Database Administrat | 55906.26 |

| 69438 | Shell Cases | 15 | Structural Analysis | 96816.65 |

| 70457 | Kelci Bulgen | 3 | Administrative Assis | 39823.31 |

| 71140 | Tod Besnard | 14 | Tax Accountant | 34532.22 |

| 75093 | Arv Benedek | 2 | Mechanical Systems E | 32376.86 |

| 79744 | Wileen Alenikov | 1 | Statistician IV | 14768.74 |

| 83852 | Bayard Flaxon | 11 | Analyst Programmer | 97382.48 |

| 99067 | Luke Bartleman | 7 | Statistician I | 63094.72 |

+-------+-----------------+------+----------------------+----------+

**3. Write a SELECT statement to display employee number, name, department number, designation, salary(basic+da+hra-pf-it) for all employees.**

**RESULT: -** SELECT EMPNO,NAME,DEPT,DESIG,(BASIC+DA+HRA+PF+IT) AS SALARY FROM EMP;

+-------+-----------------+------+----------------------+-----------+

| EMPNO | NAME | DEPT | DESIG | SALARY |

+-------+-----------------+------+----------------------+-----------+

| 21772 | Trenna Wallege | 4 | Paralegal | 293114.39 |

| 33179 | Lucita Peachman | 5 | Graphic Designer | 227493.80 |

| 35523 | Bryan Trow | 9 | Geological Engineer | 315269.71 |

| 36724 | Jonah Cornbell | 10 | Social Worker | 224572.83 |

| 40413 | Shaine Rickersy | 13 | Account Coordinator | 220030.21 |

| 40763 | Selena Holt | 6 | Chief Design Enginee | 205289.77 |

| 68475 | Lind Ebbitt | 8 | Software Test Engine | 282343.32 |

| 68917 | Lisle Slane | 12 | Database Administrat | 219199.69 |

| 69438 | Shell Cases | 15 | Structural Analysis | 394634.17 |

| 70457 | Kelci Bulgen | 3 | Administrative Assis | 254375.12 |

| 71140 | Tod Besnard | 14 | Tax Accountant | 262021.65 |

| 75093 | Arv Benedek | 2 | Mechanical Systems E | 358320.54 |

| 79744 | Wileen Alenikov | 1 | Statistician IV | 302015.00 |

| 83852 | Bayard Flaxon | 11 | Analyst Programmer | 274191.96 |

| 99067 | Luke Bartleman | 7 | Statistician I | 300367.55 |

+-------+-----------------+------+----------------------+-----------+

15 rows in set (0.00 sec)

**4.Write a SELECT statement to display employee number, name, department number, designation, salary for all employees in order of employee number.**

**RESULT: -**  SELECT EMPNO,NAME,DEPT,DESIG,(BASIC+DA+HRA+PF+IT) AS SALARY FROM EMP ORDER BY EMPNO DESC;

+-------+-----------------+------+----------------------+-----------+

| EMPNO | NAME | DEPT | DESIG | SALARY |

+-------+-----------------+------+----------------------+-----------+

| 99067 | Luke Bartleman | 7 | Statistician I | 300367.55 |

| 83852 | Bayard Flaxon | 11 | Analyst Programmer | 274191.96 |

| 79744 | Wileen Alenikov | 1 | Statistician IV | 302015.00 |

| 75093 | Arv Benedek | 2 | Mechanical Systems E | 358320.54 |

| 71140 | Tod Besnard | 14 | Tax Accountant | 262021.65 |

| 70457 | Kelci Bulgen | 3 | Administrative Assis | 254375.12 |

| 69438 | Shell Cases | 15 | Structural Analysis | 394634.17 |

| 68917 | Lisle Slane | 12 | Database Administrat | 219199.69 |

| 68475 | Lind Ebbitt | 8 | Software Test Engine | 282343.32 |

| 40763 | Selena Holt | 6 | Chief Design Enginee | 205289.77 |

| 40413 | Shaine Rickersy | 13 | Account Coordinator | 220030.21 |

| 36724 | Jonah Cornbell | 10 | Social Worker | 224572.83 |

| 35523 | Bryan Trow | 9 | Geological Engineer | 315269.71 |

| 33179 | Lucita Peachman | 5 | Graphic Designer | 227493.80 |

| 21772 | Trenna Wallege | 4 | Paralegal | 293114.39 |

+-------+-----------------+------+----------------------+-----------+

15 rows in set (0.00 sec)

1. **Write a SELECT statement to display employee number, name, department number, designation, salary for all employees in order of department number, employee number.**

**RESULT: -** SELECT EMPNO,NAME,DEPT,DESIG,(BASIC+DA+HRA+PF+IT) AS SALARY FROM EMP ORDER BY DEPT, EMPNO ASC;

+-------+-----------------+------+----------------------+-----------+

| EMPNO | NAME | DEPT | DESIG | SALARY |

+-------+-----------------+------+----------------------+-----------+

| 79744 | Wileen Alenikov | 1 | Statistician IV | 302015.00 |

| 75093 | Arv Benedek | 2 | Mechanical Systems E | 358320.54 |

| 70457 | Kelci Bulgen | 3 | Administrative Assis | 254375.12 |

| 21772 | Trenna Wallege | 4 | Paralegal | 293114.39 |

| 33179 | Lucita Peachman | 5 | Graphic Designer | 227493.80 |

| 40763 | Selena Holt | 6 | Chief Design Enginee | 205289.77 |

| 99067 | Luke Bartleman | 7 | Statistician I | 300367.55 |

| 68475 | Lind Ebbitt | 8 | Software Test Engine | 282343.32 |

| 35523 | Bryan Trow | 9 | Geological Engineer | 315269.71 |

| 36724 | Jonah Cornbell | 10 | Social Worker | 224572.83 |

| 83852 | Bayard Flaxon | 11 | Analyst Programmer | 274191.96 |

| 68917 | Lisle Slane | 12 | Database Administrat | 219199.69 |

| 40413 | Shaine Rickersy | 13 | Account Coordinator | 220030.21 |

| 71140 | Tod Besnard | 14 | Tax Accountant | 262021.65 |

| 69438 | Shell Cases | 15 | Structural Analysis | 394634.17 |

+-------+-----------------+------+----------------------+-----------+

15 rows in set (0.00 sec)

1. **Write a SELECT statement to display employee number, name, department number, designation, salary for all employees in descending order of salary.**

**RESULT: -** SELECT EMPNO,NAME,DEPT,DESIG,(BASIC+DA+HRA+PF+IT) AS SALARY FROM EMP ORDER BY SALARY DESC;

+-------+-----------------+------+----------------------+-----------+

| EMPNO | NAME | DEPT | DESIG | SALARY |

+-------+-----------------+------+----------------------+-----------+

| 69438 | Shell Cases | 15 | Structural Analysis | 394634.17 |

| 75093 | Arv Benedek | 2 | Mechanical Systems E | 358320.54 |

| 35523 | Bryan Trow | 9 | Geological Engineer | 315269.71 |

| 79744 | Wileen Alenikov | 1 | Statistician IV | 302015.00 |

| 99067 | Luke Bartleman | 7 | Statistician I | 300367.55 |

| 21772 | Trenna Wallege | 4 | Paralegal | 293114.39 |

| 68475 | Lind Ebbitt | 8 | Software Test Engine | 282343.32 |

| 83852 | Bayard Flaxon | 11 | Analyst Programmer | 274191.96 |

| 71140 | Tod Besnard | 14 | Tax Accountant | 262021.65 |

| 70457 | Kelci Bulgen | 3 | Administrative Assis | 254375.12 |

| 33179 | Lucita Peachman | 5 | Graphic Designer | 227493.80 |

| 36724 | Jonah Cornbell | 10 | Social Worker | 224572.83 |

| 40413 | Shaine Rickersy | 13 | Account Coordinator | 220030.21 |

| 68917 | Lisle Slane | 12 | Database Administrat | 219199.69 |

| 40763 | Selena Holt | 6 | Chief Design Enginee | 205289.77 |

+-------+-----------------+------+----------------------+-----------+

1. **Write a SELECT statement to display employee number, name, department number, designation, salary for all employees in order of joining year.**

**RESULT: -** SELECT EMPNO,NAME,DEPT,DESIG,(BASIC+DA+HRA+PF+IT) AS SALARY,JDATE FROM EMP ORDER BY JDATE;

+-------+-------------------+------+----------------------+-----------+------------+

| EMPNO | NAME | DEPT | DESIG | SALARY | JDATE |

+-------+-------------------+------+----------------------+-----------+------------+

| 84349 | Evangelia Fancott | 4 | Payment Adjustment C | 316320.33 | 2010-02-04 |

| 52655 | Opaline Streak | 1 | Desktop Support Tech | 198099.39 | 2010-08-14 |

| 14700 | Benni Dickie | 11 | Research Assistant I | 139721.17 | 2011-02-14 |

| 97736 | Sibbie Aldous | 9 | Nurse Practicioner | 269744.49 | 2011-07-13 |

| 83489 | Maible Pragnell | 14 | Occupational Therapi | 303349.91 | 2011-09-04 |

| 10696 | Mike Raselles | 7 | Environmental Tech | 300880.50 | 2013-03-18 |

| 70108 | Edeline Whytock | 5 | Environmental Specia | 225703.19 | 2013-04-29 |

| 12483 | Lewiss Narup | 12 | Compensation Analyst | 308882.89 | 2013-07-02 |

| 54087 | Bertie MacGow | 3 | Internal Auditor | 387466.54 | 2015-06-11 |

| 38686 | Stinky Foggarty | 2 | Software Engineer II | 297325.04 | 2015-12-18 |

| 30828 | Isidora Beisley | 15 | Quality Engineer | 181614.72 | 2016-07-27 |

| 31862 | Marya Bednell | 8 | Structural Engineer | 252386.87 | 2016-11-07 |

| 13625 | Jodee Doughton | 6 | Quality Engineer | 292594.56 | 2016-11-16 |

| 89096 | Kial Lebang | 10 | VP Accounting | 280601.74 | 2017-10-19 |

| 31748 | Morry Thurbon | 13 | Senior Quality Engin | 196882.95 | 2017-12-22 |

+-------+-------------------+------+----------------------+-----------+------------+

15 rows in set (0.00 sec)

1. **Write a SELECT statement to display employee number, name, department number, designation, salary for all employees of department number 5 in order of employee number.**

**RESULT:** SELECT EMPNO,NAME,DEPT,DESIG,(BASIC+DA+HRA+PF+IT) AS SALARY,JDATE FROM EMP WHERE DEPT=5 ORDER BY JDATE;

+-------+-----------------+------+----------------------+-----------+------------+

| EMPNO | NAME | DEPT | DESIG | SALARY | JDATE |

+-------+-----------------+------+----------------------+-----------+------------+

| 70108 | Edeline Whytock | 5 | Environmental Specia | 225703.19 | 2013-04-29 |

+-------+-----------------+------+----------------------+-----------+------------+

1 row in set (0.00 sec)

1. **Write a SELECT statement to display employee number, name, department number, designation, salary for all employees drawing salary > 10000 in order of employee number.**

**RESULT: -** SELECT EMPNO,NAME,DEPT,DESIG,(BASIC+DA+HRA+PF+IT) AS SALARY,JDATE FROM EMP WHERE (BASIC+DA+HRA+PF+IT)>10000 ORDER BY EMPNO;

+-------+-------------------+------+----------------------+-----------+------------+

| EMPNO | NAME | DEPT | DESIG | SALARY | JDATE |

+-------+-------------------+------+----------------------+-----------+------------+

| 10696 | Mike Raselles | 7 | Environmental Tech | 300880.50 | 2013-03-18 |

| 12483 | Lewiss Narup | 12 | Compensation Analyst | 308882.89 | 2013-07-02 |

| 13625 | Jodee Doughton | 6 | Quality Engineer | 292594.56 | 2016-11-16 |

| 14700 | Benni Dickie | 11 | Research Assistant I | 139721.17 | 2011-02-14 |

| 30828 | Isidora Beisley | 15 | Quality Engineer | 181614.72 | 2016-07-27 |

| 31748 | Morry Thurbon | 13 | Senior Quality Engin | 196882.95 | 2017-12-22 |

| 31862 | Marya Bednell | 8 | Structural Engineer | 252386.87 | 2016-11-07 |

| 38686 | Stinky Foggarty | 2 | Software Engineer II | 297325.04 | 2015-12-18 |

| 52655 | Opaline Streak | 1 | Desktop Support Tech | 198099.39 | 2010-08-14 |

| 54087 | Bertie MacGow | 3 | Internal Auditor | 387466.54 | 2015-06-11 |

| 70108 | Edeline Whytock | 5 | Environmental Specia | 225703.19 | 2013-04-29 |

| 83489 | Maible Pragnell | 14 | Occupational Therapi | 303349.91 | 2011-09-04 |

| 84349 | Evangelia Fancott | 4 | Payment Adjustment C | 316320.33 | 2010-02-04 |

| 89096 | Kial Lebang | 10 | VP Accounting | 280601.74 | 2017-10-19 |

| 97736 | Sibbie Aldous | 9 | Nurse Practicioner | 269744.49 | 2011-07-13 |

+-------+-------------------+------+----------------------+-----------+------------+

15 rows in set (0.00 sec)

**10. Write a SELECT statement to display employee number, name, department number, designation, salary for all employees whose names begin with ‘J’ in order of employee number.**

**RESULT: -** SELECT EMPNO,NAME,DEPT,DESIG,(BASIC+DA+HRA+PF+IT) AS SALARY FROM EMP WHERE NAME LIKE 'J%' ORDER BY EMPNO;

+-------+----------------+------+------------------+-----------+

| EMPNO | NAME | DEPT | DESIG | SALARY |

+-------+----------------+------+------------------+-----------+

| 13625 | Jodee Doughton | 6 | Quality Engineer | 292594.56 |

+-------+----------------+------+------------------+-----------+

1 row in set (0.00 sec)

**11. Write a SELECT statement to display employee number, name, department number, department name, location, designation, salary in order of employee number.**

**RESULT: -** SELECT EMPNO,ENAME,DNO,DNAME,LOC,DESIG,(BASIC+DA+HRA+PF+IT) AS SALARY FROM EMP JOIN DEPT USING(DNO) ORDER BY EMPNO;

+-------+-------------------+-----+-----------------+----------------------+----------------------+-----------+

| EMPNO | ENAME | DNO | DNAME | LOC | DESIG | SALARY |

+-------+-------------------+-----+-----------------+----------------------+----------------------+-----------+

| 10696 | Mike Raselles | 7 | Legal | 1 Esker Avenue | Environmental Tech | 300880.50 |

| 12483 | Lewiss Narup | 12 | Services | 6265 Forest Dale Hil | Compensation Analyst | 308882.89 |

| 13625 | Jodee Doughton | 6 | Support | 52336 Almo Street | Quality Engineer | 292594.56 |

| 14700 | Benni Dickie | 11 | Marketing | 40 Algoma Avenue | Research Assistant I | 139721.17 |

| 30828 | Isidora Beisley | 15 | Engineering | 810 Maple Wood Parkw | Quality Engineer | 181614.72 |

| 31748 | Morry Thurbon | 13 | Human Resources | 99 Montana Place | Senior Quality Engin | 196882.95 |

| 31862 | Marya Bednell | 8 | Marketing | 8 Continental Point | Structural Engineer | 252386.87 |

| 38686 | Stinky Foggarty | 2 | Sales | 63 Boyd Place | Software Engineer II | 297325.04 |

| 52655 | Opaline Streak | 1 | Business Develo | 1839 Dayton Terrace | Desktop Support Tech | 198099.39 |

| 54087 | Bertie MacGow | 3 | Sales | 3 Larry Crossing | Internal Auditor | 387466.54 |

| 70108 | Edeline Whytock | 5 | Training | 48 Morningstar Point | Environmental Specia | 225703.19 |

| 83489 | Maible Pragnell | 14 | Marketing | 66882 Vidon Crossing | Occupational Therapi | 303349.91 |

| 84349 | Evangelia Fancott | 4 | Support | 0217 Nova Drive | Payment Adjustment C | 316320.33 |

| 89096 | Kial Lebang | 10 | Research and De | 8 Maywood Park | VP Accounting | 280601.74 |

| 97736 | Sibbie Aldous | 9 | Training | 343 Rowland Trail | Nurse Practicioner | 269744.49 |

+-------+-------------------+-----+-----------------+----------------------+----------------------+-----------+

**12. Write a SELECT statement to display employee number, name, department number, designation, salary for all employees in location ‘Building 1’ in order of employee number.**

**RESULT: -** SELECT EMPNO,ENAME,DEPT.DNO,DESIG,(BASIC+DA+HRA+PF+IT) AS SALARY FROM EMP JOIN DEPT WHERE LOC = 'BUILDING 1';

+-------+-------------------+-----+----------------------+-----------+

| EMPNO | ENAME | DNO | DESIG | SALARY |

+-------+-------------------+-----+----------------------+-----------+

| 10696 | Mike Raselles | 16 | Environmental Tech | 300880.50 |

| 12483 | Lewiss Narup | 16 | Compensation Analyst | 308882.89 |

| 13625 | Jodee Doughton | 16 | Quality Engineer | 292594.56 |

| 14700 | Benni Dickie | 16 | Research Assistant I | 139721.17 |

| 30828 | Isidora Beisley | 16 | Quality Engineer | 181614.72 |

| 31748 | Morry Thurbon | 16 | Senior Quality Engin | 196882.95 |

| 31862 | Marya Bednell | 16 | Structural Engineer | 252386.87 |

| 38686 | Stinky Foggarty | 16 | Software Engineer II | 297325.04 |

| 52655 | Opaline Streak | 16 | Desktop Support Tech | 198099.39 |

| 54087 | Bertie MacGow | 16 | Internal Auditor | 387466.54 |

| 70108 | Edeline Whytock | 16 | Environmental Specia | 225703.19 |

| 83489 | Maible Pragnell | 16 | Occupational Therapi | 303349.91 |

| 84349 | Evangelia Fancott | 16 | Payment Adjustment C | 316320.33 |

| 89096 | Kial Lebang | 16 | VP Accounting | 280601.74 |

| 97736 | Sibbie Aldous | 16 | Nurse Practicioner | 269744.49 |

+-------+-------------------+-----+----------------------+-----------+

**13. Write a SELECT statement to display department number, department name, location, average, minimum and maximum salary given for that department in order of department number.**

**RESULT:** SELECT DEPT.DNO,DNAME,LOC,AVG(BASIC+DA+HRA+PF+IT) AS AVG\_SALARY,MIN(BASIC+DA+HRA+PF+IT) AS MIN\_SALARY,MAX(BASIC+DA+HRA+PF+IT) AS MAX\_SALARY FROM DEPT JOIN EMP ORDER BY DNO;

+-----+-----------------+---------------------+---------------+------------+------------+

| DNO | DNAME | LOC | AVG\_SALARY | MIN\_SALARY | MAX\_SALARY |

+-----+-----------------+---------------------+---------------+------------+------------+

| 1 | Business Develo | 1839 Dayton Terrace | 263438.286458 | 139721.17 | 387466.54 |

+-----+-----------------+---------------------+---------------+------------+------------+

**14. Write a SELECT statement to display the number, name, department, designation, salary for the employee getting maximum salary.**

**RESULT: -** SELECT EMPNO,ENAME,DEPT.DNO,DESIG,(BASIC+DA+HRA+PF+IT) AS SALARY,MAX(BASIC+DA+HRA+PF+IT) AS MAX\_SALARY FROM EMP JOIN DEPT ;

+-------+---------------+-----+--------------------+-----------+------------+

| EMPNO | ENAME | DNO | DESIG | SALARY | MAX\_SALARY |

+-------+---------------+-----+--------------------+-----------+------------+

| 10696 | Mike Raselles | 1 | Environmental Tech | 300880.50 | 387466.54 |

+-------+---------------+-----+--------------------+-----------+------------+

**15. Write a SELECT statement to display account type, account number, customer name for all accounts in which there has been a transaction today.**

**RESULT: -** select t.ac\_type, t.ac\_no, t.TDate, c.name from trans as t inner join ac\_mast a inner join cust\_mast c on t.ac\_no=a.ac\_no and a.cust\_no=c.cust\_no where tdate=curdate();

Empty set (0.00 sec)

**16. Write a SELECT statement to display account type, account number, customer name for all accounts in which there has not been a transaction today.**

**RESULT:** select t.ac\_type, t.ac\_no, t.TDate, c.name from trans as t inner join ac\_mast a inner join cust\_mast c on t.ac\_no=a.ac\_no and a.cust\_no=c.cust\_no where tdate!=curdate();

Empty set (0.00 sec)

**17. Write a SELECT statement to display customer number, name, address for all customers having no accounts.**

**RESULT: - -** select cust\_no, name ,addr1, addr2 ,addr3 , city ,State from cust\_mast where cust\_no not in (select cust\_no from ac\_mast);

+---------+-----------------------+------------------------+------------------------+-------------------------+---------------+------------+

| cust\_no | name | addr1 | addr2 | addr3 | city | State |

+---------+-----------------------+------------------------+------------------------+-------------------------+---------------+------------+

| 20940 | Dillie Gemlett | 82 Larry Pass | 623 Basil Plaza | 544 Schiller Point | Sacramento | California |

| 22913 | Mamie Beckford | 22642 Montana Terrace | 904 Trailsway Trail | 51 Fisk Center | Baton Rouge | Louisiana |

| 30475 | Virgie Maskill | 59 Buena Vista Parkway | 111 Towne Lane | 47 Monument Road | Sacramento | California |

| 34027 | Roobbie Matiebe | 666 Cardinal Circle | 6844 Dexter Point | 5 Vera Road | Aurora | Colorado |

| 36453 | Kesley Pugsley | 59178 Hudson Lane | 01 Onsgard Drive | 5720 Straubel Parkway | Houston | Texas |

| 37503 | Steffie Slimm | 0064 Oneill Street | 7 Lake View Way | 3703 Bobwhite Lane | Petaluma | California |

| 57524 | Isabella Benoey | 3611 Karstens Pass | 8644 Emmet Drive | 89 Morningstar Junction | Houston | Texas |

| 63406 | Skipton Mack | 12 Shoshone Circle | 3854 Macpherson Lane | 99614 Sherman Way | Peoria | Arizona |

| 63547 | Brandon Alessandretti | 55 Crowley Plaza | 95 Packers Trail | 5 Cody Drive | Roanoke | Virginia |

| 69488 | Francoise Janatka | 05 Tennessee Way | 3 Maryland Hill | 6696 Sutteridge Street | Portland | Oregon |

| 69722 | Mireille Melan | 487 Hallows Pass | 4 Blue Bill Park Court | 407 Lakewood Crossing | Evansville | Indiana |

| 78723 | Germana Elph | 342 Schiller Way | 2 Lien Terrace | 9936 Moland Way | New York City | New York |

| 80582 | Amy Quarrell | 3749 Comanche Alley | 70 Westridge Circle | 15184 Sloan Center | New York City | New York |

| 80939 | Winthrop Slee | 933 Westport Circle | 8 Esker Point | 5752 Menomonie Alley | Tacoma | Washington |

| 87576 | Rudolf Grzeskowski | 50 Onsgard Parkway | 30859 Acker Avenue | 5094 Beilfuss Street | Bronx | New York |

+---------+-----------------------+------------------------+------------------------+-------------------------+---------------+------------+

**18. Write a SELECT statement to display customer number, name, address for all customers having more than one accounts.**

**RESULT: -** select cust\_no, name , ADDR1, ADDR2, ADDR3, City,State from cust\_mast where cust\_no in (select cust\_no from ac\_mast group by cust\_no having count(cust\_no) > 1);

Empty set (0.00 sec)

**19. Write a SELECT statement to display customer number, name, number of accounts, address for all customers having more than one accounts.**

**RESULT: -** select cust\_no, name , ADDR1, ADDR2, ADDR3, City,State from cust\_mast where cust\_no in (select cust\_no from ac\_mast group by cust\_no having count(cust\_no) > 1);

Empty set (0.00 sec)

**20. Write a SELECT statement to display name, department, designation, account type, account number for all employees having an account with the bank.**

**RESULT: -** select e.name, (select d.name from dept d where e.dno=d.dno) AS DeptName, e.desig, a.ac\_type, a.ac\_no from emp as e inner join cust\_mast c on e.name=c.name inner join ac\_mast a on c.cust\_no=a.cust\_no;

Empty set (0.00 sec)

**21. Write a SELECT statement to display names of all people who are either an employee of the organization or have an account with the bank.**

**RESULT: -** select cust\_no, name , ADDR1, ADDR2, ADDR3, City,State from cust\_mast where cust\_no in (select cust\_no from ac\_mast group by cust\_no having count(cust\_no) > 1);

Empty set (0.00 sec)

**22. Write a SELECT statement to display the names and type (Account Holder / Employee) of all people who are either an employee of the organization or have an account with the bank in ascending order of name.**

**RESULT: -** select cust\_no, name , ADDR1, ADDR2, ADDR3, City,State from cust\_mast where cust\_no in (select cust\_no from ac\_mast group by cust\_no having count(cust\_no) > 1) and name asc;

Empty set (0.00 sec)

**23. Write a SQL statement to increase the basic of employee ‘Master’ by 1000.**

**RESULT: -** update emp set basic = basic+1000 where name like 'roobie matiebe';

Query OK, 0 rows affected (0.00 sec)

Rows matched: 0 Changed: 0 Warnings: 0

**24. Write a SQL statement to increase the basic of all employees of department ‘MKTG’ by 500.**

**RESULT:** - update emp set basic =basic +500 where dno = (select dno from dept where name like 'Librarian');

Query OK, 0 rows affected (0.00 sec)

Rows matched: 0 Changed: 0 Warnings: 0

**25. Write a SQL statement to increase the basic of all employees of department ‘MKTG’ And ‘FINANCE’ by 500.**

**RESULT: -** update emp set basic=basic+500 where dno in (select dno from dept where name like 'mktg' or name like 'finance' );

Query OK, 0 rows affected (0.00 sec)

Rows matched: 0 Changed: 0 Warnings: 0

**26. Write a SQL statement to increase the basic of all employees of all departments whose name begins with ‘M’ by 300.**

**RESULT:** - update emp set basic=basic+300 where dno = (select dno from dept where name like 'm%');

**27. Write a SQL statement to increase the basic of all employees by 10%.**

**RESULT: -** update emp set basic=basic+(basic\*0.10);

Query OK, 15 rows affected (0.07 sec)

Rows matched: 15 Changed: 15 Warnings: 0

**28. Write a SQL statement to modify basics so that all managers get atleast as much basic as the clerk with highest basic.**

**RESULT: -** delete from emp where desig like 'teacher';

Query OK, 1 row affected (0.06 sec)

**29. Write a SQL statement to delete all salesmen in the MKTG department.**

**RESULT: -** delete from emp where desig like 'mktg' and dno = (select dno from dept where name like mktg');

Query OK, 0 rows affected (0.00 sec)

**30. Write a SQL statement to remove all employees who are in service for less than a year.**

**RESULT:** - delete from emp where year(jdate) = (year(curdate())-1);

Query OK, 2 rows affected (0.07 sec)

**31. Write a SQL statement to delete all employees who are in service for more than 30 years.**

**RESULT: -** delete from emp where TIMESTAMPDIFF(year,jdate,curdate()) >= 30;

Query OK, 0 rows affected (0.00 sec)

**32. Create a table EMP2 with same structure as the EMP table but no data.**

**RESULT: -** CREATE TABLE EMP2 AS select \* FROM EMP;

Query OK, 0 rows affected (0.34 sec)

Records: 0 Duplicates: 0 Warnings: 0

DESC EMP2;

+-------+-------------+------+-----+---------+-------+

| Field | Type | Null | Key | Default | Extra |

+-------+-------------+------+-----+---------+-------+

| EMPNO | int(5) | NO | | NULL | |

| NAME | varchar(50) | NO | | NULL | |

| JDATE | date | NO | | NULL | |

| DEPT | int(3) | NO | | NULL | |

| DESIG | varchar(20) | NO | | NULL | |

| BASIC | float(10,2) | NO | | NULL | |

| DA | float(10,2) | NO | | NULL | |

| HRA | float(10,2) | NO | | NULL | |

| PF | float(10,2) | NO | | NULL | |

| IT | float(10,2) | NO | | NULL | |

+-------+-------------+------+-----+---------+-------+

10 rows in set (0.00 sec)

**33. Change the type of employee number from INTEGER(5) to VARCHAR(6) in EMP2.**

**RESULT:-**]> ALTER TABLE EMP2 MODIFY COLUMN EMPNO VARCHAR(6) NOT NULL;

Query OK, 0 rows affected (0.57 sec)

Records: 0 Duplicates: 0 Warnings: 0

DESC EMP2;

+-------+-------------+------+-----+---------+-------+

| Field | Type | Null | Key | Default | Extra |

+-------+-------------+------+-----+---------+-------+

| EMPNO | varchar(6) | NO | | NULL | |

| NAME | varchar(50) | NO | | NULL | |

| JDATE | date | NO | | NULL | |

| DEPT | int(3) | NO | | NULL | |

| DESIG | varchar(20) | NO | | NULL | |

| BASIC | float(10,2) | NO | | NULL | |

| DA | float(10,2) | NO | | NULL | |

| HRA | float(10,2) | NO | | NULL | |

| PF | float(10,2) | NO | | NULL | |

| IT | float(10,2) | NO | | NULL | |

+-------+-------------+------+-----+---------+-------+

**34. Bring only employee number, name, department number and designation into EMP2 from EMP.**

**RESULT: -** insert into emp2 (empno, name, dno, desig) select empno, name, dno, desig from emp;

Query OK, 15 rows affected, 6 warnings (0.17 sec)

Records: 15 Duplicates: 0 Warnings: 6

**35. Insert suitable data in the rest of the columns of EMP2.**

**RESULT:** - INSERT INTO EMP2(JDATE,DA,HRA,PF,IT) SELECT JDATE,DA,HRA,PF,IT FROM EMP;

Query OK, 15 rows affected, 5 warnings (0.20 sec)

Records: 15 Duplicates: 0 Warnings: 5

**36. Add a column status char (P or T only) to EMP2.**

**RESULT: -** Alter table emp2 add column status char(1) default 'p';

Query OK, 0 rows affected (0.53 sec)

Records: 0 Duplicates: 0 Warnings: 0

**37. Make employee name the primary key of EMP2 (delete duplicate names first).**

**RESULT: -**ALTER TABLE EMP2

-> ADD PRIMARY KEY(ENAME);

Query OK, 0 rows affected (0.49 sec)

Records: 0 Duplicates: 0 Warnings: 0

**38. Set foreign key in EMP2.**

**RESULT: -** alter table emp2 add constraint emp\_fk FOREIGN KEY (DNo) REFERENCES DepT(DNo);

Query OK, 0 rows affected (0.98 sec)

Records: 0 Duplicates: 0 Warnings: 0

**39. Make employee number unique in EMP2.**

**RESULT: -** alter table emp2 add unique(empNo);

Query OK, 0 rows affected (0.48 sec)

Records: 0 Duplicates: 0 Warnings: 0

**40. Set the joining date of all employees whose joining date is not known to 01/01/70 in EMP2.**

**RESULT:** - update emp2 set jdate='01-01-1970' where jdate='00-00-0000';

Query OK, 0 rows affected, 15 warnings (0.00 sec)

Rows matched: 15 Changed: 0 Warnings: 15

**41. Remove table EMP2.**

**RESULT: -** drop table emp2;

Query OK, 0 rows affected (0.14 sec)

**42. Create an index on column name in the table EMP.**

**RESULT:** - create index emp\_index on emp(empno,name,desig);

Query OK, 0 rows affected (0.25 sec)

**43. Create an index on columns name, city in CUST\_MAST.**

**RESULT: -** create index cust\_index on cust\_mast(cust\_no,name,city);

Query OK, 0 rows affected (0.25 sec)

**44. Remove the index created in Q. 43.**

**RESULT: -** drop index cust\_index on cust\_mast;

Query OK, 0 rows affected (0.20 sec)