Lab 1:

1. We have the Sample Database as follow

Table – Worker

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **ORKER\_ID** | **FIRST\_NAME** | **LAST\_NAME** | **SALARY** | **JOINING\_DATE** | **DEPARTMENT** |
| 001 | Monika | Arora | 100000 | 2014-02-20 09:00:00 | HR |
| 002 | Niharika | Verma | 80000 | 2014-06-11 09:00:00 | Admin |
| 003 | Vishal | Singhal | 300000 | 2014-02-20 09:00:00 | HR |
| 004 | Amitabh | Singh | 500000 | 2014-02-20 09:00:00 | Admin |
| 005 | Vivek | Bhati | 500000 | 2014-06-11 09:00:00 | Admin |
| 006 | Vipul | Diwan | 200000 | 2014-06-11 09:00:00 | Account |
| 007 | Satish | Kumar | 75000 | 2014-01-20 09:00:00 | Account |
| 008 | Geetika | Chauhan | 90000 | 2014-04-11 09:00:00 | Admin |

#### Table – Bonus

|  |  |  |
| --- | --- | --- |
| **WORKER\_REF\_ID** | **BONUS\_DATE** | **BONUS\_AMOUNT** |
| 1 | 2016-02-20 00:00:00 | 5000 |
| 2 | 2016-06-11 00:00:00 | 3000 |
| 3 | 2016-02-20 00:00:00 | 4000 |
| 1 | 2016-02-20 00:00:00 | 4500 |
| 2 | 2016-06-11 00:00:00 | 3500 |

#### Table – Title

|  |  |  |
| --- | --- | --- |
| **WORKER\_REF\_ID** | **WORKER\_TITLE** | **AFFECTED\_FROM** |
| 1 | Manager | 2016-02-20 00:00:00 |
| 2 | Executive | 2016-06-11 00:00:00 |
| 8 | Executive | 2016-06-11 00:00:00 |
| 5 | Manager | 2016-06-11 00:00:00 |
| 4 | Asst. Manager | 2016-06-11 00:00:00 |
| 7 | Executive | 2016-06-11 00:00:00 |
| 6 | Lead | 2016-06-11 00:00:00 |
| 3 | Lead | 2016-06-11 00:00:00 |

#### And use this SQL Script to create Sample Data.

CREATE DATABASE ORG;

GO

USE ORG;

CREATE TABLE Worker (

WORKER\_ID INT NOT NULL PRIMARY KEY,

FIRST\_NAME CHAR(25),

LAST\_NAME CHAR(25),

SALARY INT,

JOINING\_DATE DATETIME,

DEPARTMENT CHAR(25)

);

SET DATEFORMAT MDY

INSERT INTO Worker

(WORKER\_ID, FIRST\_NAME, LAST\_NAME, SALARY, JOINING\_DATE, DEPARTMENT) VALUES

(1, 'Monika', 'Arora', 100000, '02-20-2014', 'HR'),

(2, 'Niharika', 'Verma', 80000, '06-11-2014', 'Admin'),

(3, 'Vishal', 'Singhal', 300000, '02-20-2014', 'HR'),

(4, 'Amitabh', 'Singh', 500000, '02-20-2014', 'Admin'),

(5, 'Vivek', 'Bhati', 500000, '06-11-2014', 'Admin'),

(6, 'Vipul', 'Diwan', 200000, '06-11-2014', 'Account'),

(7, 'Satish', 'Kumar', 75000, '01-20-2014', 'Account'),

(8, 'Geetika', 'Chauhan', 90000, '04-11-2014', 'Admin');

CREATE TABLE Bonus (

WORKER\_REF\_ID INT,

BONUS\_AMOUNT INT(10),

BONUS\_DATE DATETIME,

PRIMARY KEY (WORKER\_REF\_ID,BONUS\_AMOUNT, BONUS\_DATE),

FOREIGN KEY (WORKER\_REF\_ID)

REFERENCES Worker(WORKER\_ID)

);

INSERT INTO Bonus

(WORKER\_REF\_ID, BONUS\_AMOUNT, BONUS\_DATE) VALUES

(1, 5000, '02-20-2016'),

(2, 3000, '06-11-2016'),

(3, 4000, '02-20-2016'),

(1, 4500, '02-20-2016'),

(2, 3500, '06-11-2016');

CREATE TABLE Title (

WORKER\_REF\_ID INT,

WORKER\_TITLE CHAR(25),

AFFECTED\_FROM DATETIME,

FRIMARY KEY (WORKER\_REF\_ID, WORKER\_TITLE, AFFECTED\_FROM ),

FOREIGN KEY (WORKER\_REF\_ID)

REFERENCES Worker(WORKER\_ID)

);

INSERT INTO Title

(WORKER\_REF\_ID, WORKER\_TITLE, AFFECTED\_FROM) VALUES

(1, 'Manager', '02-20-2016'),

(2, 'Executive', '06-11-2016'),

(8, 'Executive', '06-11-2016'),

(5, 'Manager', '06-11-2016'),

(4, 'Asst. Manager', '06-11-2016'),

(7, 'Executive', '06-11-2016'),

(6, 'Lead', '06-11-2016'),

(3, 'Lead', '06-11-2016');

1. Answer the following queries with sql:

#### Q-1. Write An SQL Query To Fetch “FIRST\_NAME” From Worker Table Using The Alias Name As <WORKER\_NAME>.

#### Q-2. Write An SQL Query To Fetch “FIRST\_NAME” From Worker Table In Upper Case.

#### Q-3. Write An SQL Query To Fetch Unique Values Of DEPARTMENT From Worker Table.

#### Q-4. Write An SQL Query To Print The First Three Characters Of  FIRST\_NAME From Worker Table.

#### Q-5. Write An SQL Query To Find The Position Of The Alphabet (‘A’) In The First Name Column ‘Amitabh’ From Worker Table.

#### Q-6. Write An SQL Query To Print The FIRST\_NAME From Worker Table After Removing White Spaces From The Right Side.

#### Q-7. Write An SQL Query To Print The DEPARTMENT From Worker Table After Removing White Spaces From The Left Side.

#### Q-8. Write An SQL Query That Fetches The Unique Values Of DEPARTMENT From Worker Table And Prints Its Length.

#### Q-9. Write An SQL Query To Print The FIRST\_NAME From Worker Table After Replacing ‘A’ With ‘A’.

#### Q-10. Write An SQL Query To Print The FIRST\_NAME And LAST\_NAME From Worker Table Into A Single Column COMPLETE\_NAME. A Space Char Should Separate Them

#### Q-11. Write An SQL Query To Print All Worker Details From The Worker Table Order By FIRST\_NAME Ascending.

#### Q-12. Write An SQL Query To Print All Worker Details From The Worker Table Order By FIRST\_NAME Ascending And DEPARTMENT Descending.

#### Q-13. Write An SQL Query To Print Details For Workers With The First Name As “Vipul” And “Satish” From Worker Table.

#### Q-14. Write An SQL Query To Print Details Of Workers Excluding First Names, “Vipul” And “Satish” From Worker Table.

#### Q-15. Write An SQL Query To Print Details Of Workers With DEPARTMENT Name As “Admin”.

#### Q-16. Write An SQL Query To Print Details Of The Workers Whose FIRST\_NAME Contains ‘A’.

#### Q-17. Write An SQL Query To Print Details Of The Workers Whose FIRST\_NAME Ends With ‘A’.

#### Q-18. Write An SQL Query To Print Details Of The Workers Whose FIRST\_NAME Ends With ‘H’ And Contains Six Alphabets.

#### Q-19. Write An SQL Query To Print Details Of The Workers Whose SALARY Lies Between 100000 And 500000.

#### Q-20. Write An SQL Query To Print Details Of The Workers Who Have Joined In Feb’2014.

#### Q-21. Write An SQL Query To Fetch The Count Of Employees Working In The Department ‘Admin’.

#### Q-22. Write An SQL Query To Fetch Worker Names With Salaries >= 50000 And <= 100000.

#### Q-23. Write An SQL Query To Fetch The No. Of Workers For Each Department In The Descending Order.

#### Q-24. Write An SQL Query To Print Details Of The Workers Who Are Also Managers.

#### Q-25. Write An SQL Query To Fetch Duplicate Records Having Matching Data In Some Fields Of A Table.

#### Q-26. Write An SQL Query To Show Only Odd Rows From A Table.

#### Q-27. Write An SQL Query To Show Only Even Rows From A Table.

#### Q-28. Write An SQL Query To Clone A New Table From Another Table.

#### Q-29. Write An SQL Query To Fetch Intersecting Records Of Two Tables.

#### Q-30. Write An SQL Query To Show Records From One Table That Another Table Does Not Have.

#### Q-31. Write An SQL Query To Show The Current Date And Time.

#### Q-32. Write An SQL Query To Show The Top N (Say 10) Records Of A Table.

#### Q-33. Write An SQL Query To Determine The Nth (Say N=5) Highest Salary From A Table.

#### Q-34. Write An SQL Query To Determine The 5th Highest Salary Without Using TOP Or Limit Method.

#### Q-35. Write An SQL Query To Fetch The List Of Employees With The Same Salary.

#### Q-36. Write An SQL Query To Show The Second Highest Salary From A Table.

#### Q-37. Write An SQL Query To Show One Row Twice In Results From A Table.

#### Q-38. Write An SQL Query To Fetch Intersecting Records Of Two Tables.

#### Q-39. Write An SQL Query To Fetch The First 50% Records From A Table.

#### Q-40. Write An SQL Query To Fetch The Departments That Have Less Than Five People In It.

#### Q-41. Write An SQL Query To Show All Departments Along With The Number Of People In There.

#### Q-42. Write An SQL Query To Show The Last Record From A Table.

#### Q-43. Write An SQL Query To Fetch The First Row Of A Table.

#### Q-44. Write An SQL Query To Fetch The Last Five Records From A Table.

#### Q-45. Write An SQL Query To Print The Name Of Employees Having The Highest Salary In Each Department.

#### Q-46. Write An SQL Query To Fetch Three Max Salaries From A Table.

#### Q-47. Write An SQL Query To Fetch Three Min Salaries From A Table.

#### Q-48. Write An SQL Query To Fetch Nth Max Salaries From A Table.

#### Q-49. Write An SQL Query To Fetch Departments Along With The Total Salaries Paid For Each Of Them.

#### Q-50. Write An SQL Query To Fetch The Names Of Workers Who Earn The Highest Salary.