**Kishore kumar R**

**Interview Questions on SQL are based on following two tables, Employee Table and Employee Incentive Table.**

**Table Name : Employee EMP\_ID As PRIMARY KEY**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **EMPLOYEE\_ID** | **FIRST\_NAME** | **LAST\_NAME** | **SALARY** | **JOINING\_DATE** | **DEPARTMENT** | | |
| **1** | **Venkatesh** | **S** | **100000** | **08/28/2015** | | **BANKING** | | |
| **2** | **Ragavi** | **P** | **75000** | **08/28/2015** | | | **BUSINESS** | |
| **3** | **Gopinath** | **C** | **50000** | **03/02/2016** | | | **PHARMA** | |
| **4** | **Dinesh** | **G** | **50000** | **03/02/2016** | | | **INSURANCE** | |
| **5** | **Saibabu** | **E** | **40000** | **07/08/2017** | | | **SOFTWARE** | |
| **6** | **Hasan** | **S** | **29000** | **07/08/2017** | | | **MANUFACTURING** | |
| **7** | **Divya** | **P** | **33000** | **07/08/2017** | | | **HEALTHCARE** | |
| **8** | **Aravindan** | **R** | **40000** | **07/08/2017** | | | **HEALTHCARE** | |
| **9** | **Sathish** | **MD** | **45000** | **03/02/2016** | | | **AUTOMOBILE** | |
| **10** | **Prasanth** | **PKP** | **34000** | **03/02/2016** | | | **INSURANCE** | |
| **11** | **Vijay** | **R** | **25684** | **03/02/2016** | | | **BUSINESS** | |
| **12** | **Sivakumar** | **K** | **54789** | **03/02/2016** | | | **SOFTWARE** | |

**Table Name : Incentives**

|  |  |  |
| --- | --- | --- |
| **EMPLOYEE\_REF\_ID** | **INCENTIVE\_DATE** | **INCENTIVE\_AMOUNT** |
| **1** | **01-FEB-16** | **5000** |
| **2** | **01-FEB-16** | **3000** |
| **3** | **01-FEB-17** | **4000** |
| **1** | **01-JAN-17** | **4500** |
| **2** | **01-JAN-17** | **3500** |

**SQL Queries Interview Questions and Answers on "SQL Select" - Examples**

1. **Get all employee details from the employee table**

Ans **:** select \* from employeetable ;

1. **Get First\_Name,Last\_Name from employee table**

Ans **:** select FIRST\_NAME,LAST\_NAME from employeetable;

1. **Get First\_Name from employee table using alias name “Employee Name”**

Ans **:** select FIRST\_NAME as Employee\_Name from employeetable**;**

1. **Get First\_Name from employee table in upper case**

Ans  **;** select UPPER(FIRST\_NAME) from employeetable;

1. **Get First\_Name from employee table in lower case**

Ans **:** select LOWER(FIRST\_NAME) from employeetable;

1. **Get unique DEPARTMENT from employee table**

Ans **:** select distinct DEPARTMENT from employeetable;

1. **Select first 3 characters of FIRST\_NAME from EMPLOYEE**

Ans **:** select SUBSTRING(FIRST\_NAME,1,3)from employeetable;

1. **Get position of 'a' in name 'ragavi' from employee table**

Ans **:**  select position('a' in "ragavi") as position\_value;

1. **Get FIRST\_NAME from employee table after removing white spaces from right side**

Ans **:** select Rtrim(FIRST\_NAME) from employeetable;

1. **Get FIRST\_NAME from employee table after removing white spaces from left side**

Ans **:**  select Ltrim(FIRST\_NAME) from employeetable**;**

1. **Get length of FIRST\_NAME from employee table**

Ans **:** select length(FIRST\_NAME) from employeetable;

1. Get First\_Name from employee table after replacing 'a' with '$'

Ans **:** select length(FIRST\_NAME) from employeetable;

1. **Get First\_Name and Last\_Name as single column from employee table separated by a '\_'**

Ans **:** select concat(FIRST\_NAME,"-",LAST\_NAME) FROM employeetable;

1. **Get FIRST\_NAME ,Joining year,Joining Month and Joining Date from employee table**

Ans select JOINING\_DATE from employeetable;

**Database SQL Queries Interview Questions and answers on "SQL Order By"**

1. **Get all employee details from the employee table order by First\_Name Ascending**

Ans **:** select \* from employeetable order by (FIRST\_NAME)asce**;**

1. **Get all employee details from the employee table order by First\_Name descending**

Ans  **:**select \* from employeetable order by (FIRST\_NAME)desc;

1. **Get all employee details from the employee table order by First\_Name Ascending and Salary descending**

Ans **:** select \*from employeetable order by(FIRST\_NAME)asc;

select \*from employeetable order by(SALARY)desc;

**SQL Queries Interview Questions and Answers on "SQL Where Condition" - Examples**

1. **Get employee details from employee table whose employee name is “Dinesh”**

Ans **:** select \*from employeetable where (FIRST\_NAME="dinesh");

1. **Get employee details from employee table whose employee name are “Dinesh” and “Roy”**

Ans : select \* from employeetable where FIRST\_NAME in("dinesh","roy");

1. **Get employee details from employee table whose employee name are not “Dinesh” and “Roy”**

Ans : select \* from employeetable where FIRST\_NAME not in("dinesh","roy");

**SQL Queries Interview Questions and Answers on "SQL Wild Card Search" - Examples**

1. **Get employee details from employee table whose first name starts with 's'**

Ans : select \* from employeetable where FIRST\_NAME like 's%';

1. **Get employee details from employee table whose first name contains 'v'**

Ans :select \* from employeetable where FIRST\_NAME like '%v%';

1. **Get employee details from employee table whose first name ends with 'n'**

Ans : select \* from employeetable where FIRST\_NAME like '%n';

**SQL Queries Interview Questions and Answers on "SQL Pattern Matching" - Examples**

1. **Get employee details from employee table whose first name ends with 'n' and name contains 4 letters**

Ans : select \* from employeetable where FIRST\_NAME like '\_\_\_\_n';

1. **Get employee details from employee table whose first name starts with 'J' and name contains 4 letters**

Ans : select \* from employeetable where FIRST\_NAME like 'j\_\_\_\_';

1. **Get employee details from employee table who’s Salary greater than 60000**

Ans :select\* from employeetable where salary>60000;

1. **Get employee details from employee table who’s Salary less than 80000**

Ans :select\* from employeetable where salary<80000;

1. **Get employee details from employee table who’s Salary between 50000 and 80000**

Ans : select\* from employeetable where salary 50000 and 80000;

1. **Get employee details from employee table whose name is venkatesh and ragavi**

Ans : select \*from employeetable where FIRST\_NAME in ("venkatesh","ragavi")**;**

**SQL Queries Interview Questions and Answers on "SQL DATE Functions" - Examples**

1. **Get employee details from employee table whose joining year is “2015”**

ANS : select \*from employeetable where extract(year from JOINING\_DATE)=2015

1. **Get employee details from employee table whose joining month is “January”**

Ans : select \*from employeetable where extract(month from JOINING\_DATE)=01;

1. **Get employee details from employee table who joined before January 1st 2017**

Ans : select \* from employeetable where JOINING\_DATE > '2017/01/01';

1. **Get employee details from employee table who joined after January 31st 2016**

Ans :select \* from employeetable where JOINING\_DATE < '2016/01/31';

1. **Get Joining Date and Time from employee table**

Ans : Select CONVERT(DATE\_FORMAT(joining\_date,'%Y-%m-%d-%H:%i:00'),DATETIME) from employeetable**;**

1. **Get Joining Date,Time including milliseconds from employee** table
2. Ans : select microsecond(JOINING\_DATE) FROM employeetable;
3. **Get difference between JOINING\_DATE and INCENTIVE\_DATE from employee and incentives table**

Ans: Select FIRST\_NAME,INCENTIVE\_DATE - JOINING\_DATE from employeetable a inner join incentives B on A.EMPLOYEE\_ID = B.EMPLOYEE\_REF\_ID;

**38. Get database date**

Ans:select now();

**SQL Queries Interview Questions and Answers on "SQL Escape Characters" - Examples**

1. **Get names of employees from employee table who has '%' in Last\_Name. Tip : Escape character for special characters in a query.**

Ans; Select FIRST\_NAME from employeetable where Last\_Name like '%\%%';

**40. Get Last Name from employee table after replacing special character with white space**

Ans : Select REPLACE(LAST\_NAME,'%',' ') from employeetable;

**41. Get department,total salary with respect to a department from employee table.**

Ans : Select DEPARTMENT,sum(SALARY) Total\_Salary from employeetable group by department;

**42. Get department,total salary with respect to a department from employee table order by total salary descending**

**SQL Queries Interview Questions and Answers on "SQL Mathematical Operations using Group By" - Examples**

**43. Get department,no of employees in a department,total salary with respect to a department from employee table order by total salary descending**

**44. Get department wise average salary from employee table order by salary ascending**

**45. Get department wise maximum salary from employee table order by salary ascending**

**46. Get department wise minimum salary from employee table order by salary ascending**

**47. Select no of employees joined with respect to year and month from employee table**

**48. Select department,total salary with respect to a department from employee table where total salary greater than 800000 order by Total\_Salary descending**

**SQL Queries Interview Questions and Answers on "SQL Joins" - Examples**

**49. Select first\_name, incentive amount from employee and incentives table for those employees who have incentives**

**50. Select first\_name, incentive amount from employee and incentives table for those employees who have incentives and incentive amount greater than 3000**

**51. Select first\_name, incentive amount from employee and incentives table for all employes even if they didn't get incentives**

**52. Select first\_name, incentive amount from employee and incentives table for all employees even if they didn't get incentives and set incentive amount as 0 for those employees who didn't get incentives.**

**53. Select first\_name, incentive amount from employee and incentives table for all employees who got incentives using left join**

**54. Select max incentive with respect to employee from employee and incentives table using sub query**

**Advanced SQL Queries Interview Questions and Answers on "Top N Salary" - Examples**

**55. Select TOP 2 salary from employee table**

**56. Select TOP N salary from employee table**

**57. Select 2nd Highest salary from employee table**

**58. Select Nth Highest salary from employee table**

**SQL Queries Interview Questions and Answers on "SQL Union" - Examples**

**59. Select First\_Name,LAST\_NAME from employee table as separate rows  
60. What is the difference between UNION and UNION ALL ?**

**"Advanced SQL Queries Interview Questions and Answers"**

**61. Select employee details from employee table if data exists in incentive table ?**

**62. How to fetch data that are common in two query results ?**

**63. Get Employee ID's of those employees who didn't receive incentives without using sub query ?**

**64. Select 20 % of salary from venkat , 10% of Salary for gopi and for other 15 % of salary from employee table**

**65. Select Banking as 'Bank Dept', Insurance as 'Insurance Dept' and Services as 'Pharma Dept' from employee table**

**66. Delete employee data from employee table who got incentives in incentive table**

**67. Insert into employee table Last Name with " ' " (Single Quote - Special Character)**

**68. Select Last Name from employee table which contain only numbers**

**69. Write a query to rank employees based on their incentives for a month**

**70. Update incentive table where employee name is 'Dinesh'**