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

1. Get all employee details from the employee table

```
Select * from employee
```

2. Get First_Name,Last_Name from employee table

```
Select first_name, Last_Name from employee
```

3. Get First_Name from employee table using alias name “Employee Name”

```
Select first_name Employee Name from employee
```

4. Get First_Name from employee table in upper case

```
Select upper(FIRST_NAME) from EMPLOYEE
```

5. Get First_Name from employee table in lower case

```
Select lower(FIRST_NAME) from EMPLOYEE
```

6. Get unique DEPARTMENT from employee table

```
select distinct DEPARTMENT from EMPLOYEE
```

7. Select first 3 characters of FIRST_NAME from EMPLOYEE

Oracle Equivalent of SQL Server SUBSTRING is SUBSTR, Query : select substr(FIRST_NAME,0,3) from employee

SQL Server Equivalent of Oracle SUBSTR is SUBSTRING, Query : select substring(FIRST_NAME,0,3) from employee

MySQL Server Equivalent of Oracle SUBSTR is SUBSTRING. In MySQL start position is 1, Query : select substring(FIRST_NAME,1,3) from employee

8. Get position of 'o' in name 'John' from employee table

Oracle Equivalent of SQL Server CHARINDEX is INSTR, Query : Select instr(FIRST_NAME,'o') from employee where first_name = 'John'

SQL Server Equivalent of Oracle INSTR is CHARINDEX, Query: Select CHARINDEX('o',FIRST_NAME,0) from employee where first_name = 'John'

MySQL Server Equivalent of Oracle INSTR is LOCATE, Query: Select LOCATE('o',FIRST_NAME) from employee where first_name = 'John'

9. Get FIRST_NAME from employee table after removing white spaces from right side

```
select RTRIM(FIRST_NAME) from employee
```

10. **Get FIRST_NAME from employee table after removing white spaces from left side**

```
select LTRIM(FIRST_NAME) from employee
```

11. **Get length of FIRST_NAME from employee table**

Oracle,MYSQL Equivalent of SQL Server Len is Length , Query :select length(FIRST_NAME) from employee

SQL Server Equivalent of Oracle,MYSQL Length is Len, Query :select len(FIRST_NAME) from employee

12. **Get First_Name from employee table after replacing 'o' with '$'**

```
select REPLACE(FIRST_NAME,'o','$') from employee
```

13. **Get First_Name and Last_Name as single column from employee table separated by a '_'**

Oracle Equivalent of MySQL concat is '||', Query : Select FIRST_NAME|| '_' ||LAST_NAME from EMPLOYEE

SQL Server Equivalent of MySQL concat is '+', Query : Select FIRST_NAME + '_' +LAST_NAME from EMPLOYEE

MySQL Equivalent of Oracle '||' is concat, Query : Select concat(FIRST_NAME,'_',LAST_NAME) from EMPLOYEE

14. **Get FIRST_NAME ,Joining year,Joining Month and Joining Date from employee table**

SQL Queries in Oracle, Select FIRST_NAME, to_char(joining_date,'YYYY') JoinYear , to_char(joining_date,'Mon'), to_char(joining_date,'dd') from EMPLOYEE

SQL Queries in SQL Server, select SUBSTRING (convert(varchar,joining_date,103),7,4) , SUBSTRING (convert(varchar,joining_date,100),1,3) , SUBSTRING (convert(varchar,joining_date,100),5,2) from EMPLOYEE

SQL Queries in MySQL, select year(joining_date),month(joining_date), DAY(joining_date) from EMPLOYEE

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

15. Get all employee details from the employee table order by First_Name Ascending

Select * from employee order by FIRST_NAME asc

16. Get all employee details from the employee table order by First_Name descending

Select * from employee order by FIRST_NAME desc

17. Get all employee details from the employee table order by First_Name Ascending and Salary descending

```
Select * from employee order by FIRST_NAME asc,SALARY desc
```

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

18. Get employee details from employee table whose employee name is “John”

```
Select * from EMPLOYEE where FIRST_NAME = 'John'
```

19. Get employee details from employee table whose employee name are “John” and “Roy”

```
Select * from EMPLOYEE where FIRST_NAME in ('John','Roy')
```

20. Get employee details from employee table whose employee name are not “John” and “Roy”

```
Select * from EMPLOYEE where FIRST_NAME not in ('John','Roy')
```

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

21. Get employee details from employee table whose first name starts with 'J'

```
Select * from EMPLOYEE where FIRST_NAME like 'J%'
```

22. Get employee details from employee table whose first name contains 'o'

```
Select * from EMPLOYEE where FIRST_NAME like '%o%'
```

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

```
Select * from EMPLOYEE where FIRST_NAME like '%n'
```

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

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

```
Select * from EMPLOYEE where FIRST_NAME like '___n' (Underscores)
```

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

```
Select * from EMPLOYEE where FIRST_NAME like 'J___' (Underscores)
```

26. Get employee details from employee table whose Salary greater than 600000

```
Select * from EMPLOYEE where Salary > 600000
```

27. Get employee details from employee table whose Salary less than 800000

```
Select * from EMPLOYEE where Salary < 800000
```

28. Get employee details from employee table whose Salary between 500000 and 800000

```
Select * from EMPLOYEE where Salary between 500000 and 800000
```

29. Get employee details from employee table whose name is 'John' and 'Michael'

```
Select * from EMPLOYEE where FIRST_NAME in ('John','Michael')
```

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

30. Get employee details from employee table whose joining year is “2013”

SQL Queries in Oracle, Select * from EMPLOYEE where to_char(joining_date,'YYYY') = '2013'

SQL Queries in SQL Server, Select * from EMPLOYEE where SUBSTRING(convert(varchar,joining_date,103),7,4) = '2013'

SQL Queries in MySQL, Select * from EMPLOYEE where year(joining_date) = '2013'

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

```
SQL Queries in Oracle, Select * from EMPLOYEE where to_char(joining_date,'MM') = '01' or Select * from EMPLOYEE where to_char(joining_date,'Mon') = 'Jan'

SQL Queries in SQL Server, Select * from EMPLOYEE where SUBSTRING(convert(varchar,joining_date,100),1,3) = 'Jan'

SQL Queries in MySQL, Select * from EMPLOYEE where month(joining_date) = '01'
```

32. Get employee details from employee table who joined before January 1st 2013

```
SQL Queries in Oracle, Select * from EMPLOYEE where JOINING_DATE < to_date('01/01/2013','dd/mm/yyyy')
```

SQL Queries in SQL Server (Format - “MM/DD/YYYY”), Select * from EMPLOYEE where joining_date < '01/01/2013'

SQL Queries in MySQL (Format - “YYYY-DD-MM”), Select * from EMPLOYEE where joining_date < '2013-01-01'

33. Get employee details from employee table who joined after January 31st

SQL Queries in Oracle, Select * from EMPLOYEE where JOINING_DATE > to_date('31/01/2013','dd/mm/yyyy')

SQL Queries in SQL Server and MySQL (Format - “MM/DD/YYYY”), Select * from EMPLOYEE where joining_date >'01/31/2013'

SQL Queries in MySQL (Format - “YYYY-DD-MM”), Select * from EMPLOYEE where joining_date > '2013-01-31'

35. Get Joining Date and Time from employee table

SQL Queries in Oracle, select to_char(JOINING_DATE,'dd/mm/yyyy hh:mi:ss') from EMPLOYEE

SQL Queries in SQL Server, Select convert(varchar(19),joining_date,121) from EMPLOYEE

SQL Queries in MySQL, Select CONVERT(DATE_FORMAT(joining_date,'%Y-%m-%d-%H:%i:00'),DATETIME) from EMPLOYEE

36. Get Joining Date,Time including milliseconds from employee table

SQL Queries in Oracle, select to_char(JOINING_DATE,'dd/mm/yyyy HH:mi:ss.ff') from EMPLOYEE . Column Data Type should be “TimeStamp”

SQL Queries in SQL Server, select convert(varchar,joining_date,121) from EMPLOYEE

SQL Queries in MySQL, Select MICROSECOND(joining_date) from EMPLOYEE

37. Get difference between JOINING_DATE and INCENTIVE_DATE from employee and incentives table

Select FIRST_NAME,INCENTIVE_DATE - JOINING_DATE from employee a inner join incentives B on A.EMPLOYEE_ID = B.EMPLOYEE_REF_ID

38. Get database date

SQL Queries in Oracle, select sysdate from dual

SQL Queries in SQL Server, select getdate()

SQL Query in MySQL, select now()

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

39. Get names of employees from employee table who has '%' in Last_Name. Tip : Escape character for special characters in a query.

SQL Queries in Oracle, Select FIRST_NAME from employee where Last_Name like '%?%%'

SQL Queries in SQL Server, Select FIRST_NAME from employee where Last_Name like '%[%]%'

SQL Queries in MySQL,Select FIRST_NAME from employee where Last_Name like '%\%%'

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

```
SQL Queries in Oracle, Select translate(LAST_NAME,'%',' ') from employee
```

```
SQL Queries in SQL Server and MySQL, Select REPLACE(LAST_NAME,'%',' ') from employee
```

SQL Queries Interview Questions and Answers on "SQL Group By Functions" - Examples

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

```
Select DEPARTMENT,sum(SALARY) Total_Salary from employee group by department
```

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

```
Select DEPARTMENT,sum(SALARY) Total_Salary from employee group by DEPARTMENT 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

```
Select DEPARTMENT,count(FIRST_NAME),sum(SALARY) Total_Salary from employee group by DEPARTMENT order by Total_Salary descending
```

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

```
select DEPARTMENT,avg(SALARY) AvgSalary from employee group by DEPARTMENT
order by AvgSalary asc
```

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

```
select DEPARTMENT,max(SALARY) MaxSalary from employee group by DEPARTMENT
order by MaxSalary asc
```

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

```
select DEPARTMENT,min(SALARY) MinSalary from employee group by DEPARTMENT
order by MinSalary asc
```

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

```
SQL Queries in Oracle, select to_char (JOINING_DATE,'YYYY')
Join_Year,to_char (JOINING_DATE,'MM') Join_Month,count(*) Total_Emp from
employee group by to_char (JOINING_DATE,'YYYY'),to_char(JOINING_DATE,'MM')

SQL Queries in SQL Server, select datepart (YYYY,JOINING_DATE)
Join_Year,datepart (MM,JOINING_DATE) Join_Month,count(*) Total_Emp from
employee group by datepart(YYYY,JOINING_DATE), datepart(MM,JOINING_DATE)

SQL Queries in MySQL, select year (JOINING_DATE) Join_Year,month
(JOINING_DATE) Join_Month,count(*) Total_Emp from employee group by
year(JOINING_DATE),                                    month(JOINING_DATE)
```

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

```
Select DEPARTMENT,sum(SALARY) Total_Salary from employee group by
DEPARTMENT having sum(SALARY) > 800000 order by Total_Salary desc
```

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

Select FIRST_NAME,INCENTIVE_AMOUNT from employee a inner join incentives B on A.EMPLOYEE_ID = B.EMPLOYEE_REF_ID

50. Select first_name, incentive amount from employee and incentives table for those employees who have incentives and incentive amount greater than 3000

```
Select FIRST_NAME,INCENTIVE_AMOUNT from employee a inner join incentives B
on A.EMPLOYEE_ID = B.EMPLOYEE_REF_ID and INCENTIVE_AMOUNT > 3000
```

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

```
Select FIRST_NAME,INCENTIVE_AMOUNT from employee a left join incentives B
on A.EMPLOYEE_ID = B.EMPLOYEE_REF_ID
```

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.

```
SQL Queries in Oracle, Select FIRST_NAME,nvl(INCENTIVE_AMOUNT,0) from
employee a left join incentives B on A.EMPLOYEE_ID = B.EMPLOYEE_REF_ID

SQL Queries in SQL Server, Select FIRST_NAME, ISNULL(INCENTIVE_AMOUNT,0)
from employee a left join incentives B on A.EMPLOYEE_ID = B.EMPLOYEE_REF_ID

SQL Queries in MySQL, Select FIRST_NAME, IFNULL(INCENTIVE_AMOUNT,0) from
employee a left join incentives B on A.EMPLOYEE_ID = B.EMPLOYEE_REF_ID
```

53. Select first_name, incentive amount from employee and incentives table for all employees who got incentives using left join

```
SQL Queries in Oracle, Select FIRST_NAME,nvl(INCENTIVE_AMOUNT,0) from
employee a right join incentives B on A.EMPLOYEE_ID = B.EMPLOYEE_REF_ID

SQL Queries in SQL Server, Select FIRST_NAME, isnull(INCENTIVE_AMOUNT,0)
from employee a right join incentives B on A.EMPLOYEE_ID =
B.EMPLOYEE_REF_ID

SQL Queries in MySQL, Select FIRST_NAME, IFNULL(INCENTIVE_AMOUNT,0) from
employee a right join incentives B on A.EMPLOYEE_ID = B.EMPLOYEE_REF_ID
```

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

```
SQL Queries in Oracle, select DEPARTMENT,(select
nvl(max(INCENTIVE_AMOUNT),0) from INCENTIVES where EMPLOYEE_REF_ID =
EMPLOYEE_ID) Max_incentive from EMPLOYEE

SQL Queries in SQL Server, select DEPARTMENT,(select
ISNULL(max(INCENTIVE_AMOUNT),0) from INCENTIVES where EMPLOYEE_REF_ID =
EMPLOYEE_ID) Max_incentive from EMPLOYEE

SQL Queries in SQL Server, select DEPARTMENT,(select IFNULL
(max(INCENTIVE_AMOUNT),0) from INCENTIVES where EMPLOYEE_REF_ID =
EMPLOYEE_ID) Max_incentive from EMPLOYEE
```

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

55. Select TOP 2 salary from employee table

```
SQL Queries in Oracle, select * from (select * from employee order by
SALARY          desc)          where          rownum          <          3

SQL Queries in SQL Server, select top 2 * from employee order by salary
desc

SQL Queries in MySQL, select * from employee order by salary desc limit 2
```

56. Select TOP N salary from employee table

```
SQL Queries in Oracle, select * from (select * from employee order by
SALARY       desc)       where       rownum       <       N       +       1

SQL   Queries   in   SQL   Server,   select   top   N   *   from   employee

SQL Queries in MySQL, select * from employee order by salary desc limit N
```

57. Select 2nd Highest salary from employee table

```
SQL Queries in Oracle, select min(salary) from (select * from (select *
from   employee   order   by   SALARY   desc)   where   rownum   <   3)

SQL Queries in SQL Server, select min(SALARY) from (select top 2 * from
employee)                                                              a

SQL Queries in MySQL, select min(SALARY) from (select * from employee order
by          salary          desc          limit          2)          a
```

58. Select Nth Highest salary from employee table

```
SQL Queries in Oracle, select min(salary) from (select * from (select *
from   employee   order   by   SALARY   desc)   where   rownum   <   N   +   1)

SQL Queries in SQL Server, select min(SALARY) from (select top N * from
employee)                                                              a

SQL Queries in MySQL, select min(SALARY) from (select * from employee order
by          salary          desc          limit          N)          a
```

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

59. Select First_Name,LAST_NAME from employee table as separate rows

```
select FIRST_NAME from EMPLOYEE union select LAST_NAME from EMPLOYEE
```

60. What is the difference between UNION and UNION ALL ?

```
Both UNION and UNION ALL is used to select information from structurally
similar tables. That means corresponding columns specified in the union
should have same data type. For example, in the above query, if FIRST_NAME
is DOUBLE and LAST_NAME is STRING above query wont work. Since the data
```

type of both the columns are VARCHAR, union is made possible. Difference between UNION and UNION ALL is that , UNION query return only distinct values.

"Advanced SQL Queries Interview Questions and Answers"

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

select * from EMPLOYEE where exists (select * from INCENTIVES)

Explanation : Here exists statement helps us to do the job of If statement. Main query will get executed if the sub query returns at least one row. So we can consider the sub query as "If condition" and the main query as "code block" inside the If condition. We can use any SQL commands (Joins, Group By , having etc) in sub query. This command will be useful in queries which need to detect an event and do some activity.

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

```
select * from EMPLOYEE where EMPLOYEE_ID INTERSECT select * from EMPLOYEE
where                  EMPLOYEE_ID                  <                  4
```

Explanation : Here INTERSECT command is used to fetch data that are common in 2 queries. In this example, we had taken EMPLOYEE table in both the queries.We can apply INTERSECT command on different tables. The result of the above query will return employee details of "ROY" because, employee id of ROY is 3, and both query results have the information about ROY.

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

```
select               EMPLOYEE_ID               from               EMPLOYEE

MINUS

select             EMPLOYEE_REF_ID             from             INCENTIVES
```

Explanation : To filter out certain information we use MINUS command. What MINUS Command odes is that, it returns all the results from the first query, that are not part of the second query. In our example, first three employees received the incentives. So query will return employee id's 4 to 8.

64. Select 20 % of salary from John , 10% of Salary for Roy and for other 15 % of salary from employee table

```
SELECT FIRST_NAME, CASE FIRST_NAME WHEN 'John' THEN SALARY * .2 WHEN 'Roy'
THEN SALARY * .10 ELSE SALARY * .15 END "Deduced_Amount" FROM EMPLOYEE
```

Explanation : Here we are using SQL CASE statement to achieve the desired results. After case statement, we had to specify the column on which filtering is applied. In our case it is "FIRST_NAME". And in then condition, specify the name of filter like John, Roy etc. To handle conditions outside our filter, use else block where every one other than John and Roy enters.

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

```
SQL Queries in Oracle, SELECT distinct DECODE (DEPARTMENT, 'Banking', 'Bank
Dept', 'Insurance', 'Insurance Dept', 'Services', 'Services Dept') FROM
EMPLOYEE
```

```
SQL Queries in SQL Server and MySQL, SELECT case DEPARTMENT when 'Banking'
then 'Bank Dept' when 'Insurance' then 'Insurance Dept' when 'Services'
then 'Services Dept' end FROM EMPLOYEE
```

Explanation : Here DECODE keyword is used to specify the alias name. In oracle we had specify, Column Name followed by Actual Name and Alias Name as arguments. In SQL Server and MySQL, we can use the earlier switch case statements for alias names.

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

```
delete from EMPLOYEE where EMPLOYEE_ID in (select EMPLOYEE_REF_ID from
INCENTIVES)
```

Explanation : Trick about this question is that we can't delete data from a table based on some condition in another table by joining them. Here to delete multiple entries from EMPLOYEE table, we need to use Subquery. Entries will get deleted based on the result of Subquery.

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

```
Tip - Use another single quote before special character

Insert into employee (LAST_NAME) values ('Test''')
```

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

```
Select * from EMPLOYEE where lower(LAST_NAME) = upper(LAST_NAME)
```

Explanation : Here in order to achieve the desired result, we use ASCII property of the database. If we get results for a column using Lower and Upper commands, ASCII of both results will be same for numbers. If there is any alphabets in the column, results will differ.

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

```
select FIRST_NAME,INCENTIVE_AMOUNT,DENSE_RANK() OVER (PARTITION BY
INCENTIVE_DATE ORDER BY INCENTIVE_AMOUNT DESC) AS Rank from EMPLOYEE a,
INCENTIVES b where a.EMPLOYEE_ID = b.EMPLOYEE_REF_ID
```

Explanation : Here in order to rank employees based on their rank for a month, DENSE_RANK keyword is used. Here partition by keyword helps us to sort the column with which filtering is done. Rank is provided to the column specified in the order by statement. The above query ranks employees with respect to their incentives for a given month.

70. Update incentive table where employee name is 'John'

Explanation : Here we need to join Employee and Incentive Table for updating the incentive amount. But for update statement joining query wont work. We need to use sub query to update the data in the incentive table. SQL Query is as shown below.

update INCENTIVES set INCENTIVE_AMOUNT = '9000' where EMPLOYEE_REF_ID =(select EMPLOYEE_ID from EMPLOYEE where FIRST_NAME = 'John')

SQL Queries Interview Questions and Answers on "SQL Table Scripts" - Examples

71. Write create table syntax for employee table

```
Oracle -

CREATE TABLE EMPLOYEE (
EMPLOYEE_ID NUMBER,
FIRST_NAME VARCHAR2(20 BYTE),
LAST_NAME VARCHAR2(20 BYTE),
SALARY FLOAT(126),
JOINING_DATE TIMESTAMP (6) DEFAULT sysdate,
DEPARTMENT VARCHAR2(30 BYTE) )

SQL Server -

CREATE TABLE EMPLOYEE(
EMPLOYEE_ID int NOT NULL,
FIRST_NAME varchar(50) NULL,
LAST_NAME varchar(50) NULL,
SALARY decimal(18, 0) NULL,
JOINING_DATE datetime2(7) default getdate(),
```

```
DEPARTMENT                    varchar(50)                    NULL)
```

72. Write syntax to delete table employee

```
DROP table employee;
```

73. Write syntax to set EMPLOYEE_ID as primary key in employee table

```
ALTER TABLE EMPLOYEE add CONSTRAINT EMPLOYEE_PK PRIMARY KEY(EMPLOYEE_ID)
```

74. Write syntax to set 2 fields(EMPLOYEE_ID,FIRST_NAME) as primary key in employee table

```
ALTER TABLE EMPLOYEE add CONSTRAINT EMPLOYEE_PK PRIMARY
KEY(EMPLOYEE_ID,FIRST_NAME)
```

75. Write syntax to drop primary key on employee table

```
Alter TABLE EMPLOYEE drop CONSTRAINT EMPLOYEE_PK;
```

76. Write Sql Syntax to create EMPLOYEE_REF_ID in INCENTIVES table as foreign key with respect to EMPLOYEE_ID in employee table

```
ALTER TABLE INCENTIVES ADD CONSTRAINT INCENTIVES_FK FOREIGN KEY
(EMPLOYEE_REF_ID) REFERENCES EMPLOYEE(EMPLOYEE_ID)
```

77. Write SQL to drop foreign key on employee table

```
ALTER TABLE INCENTIVES drop CONSTRAINT INCENTIVES_FK;
```

78. Write SQL to create Orcale Sequence

```
CREATE SEQUENCE EMPLOYEE_ID_SEQ START WITH 0 NOMAXVALUE MINVALUE 0 NOCYCLE
NOCACHE NOORDER;
```

79. Write Sql syntax to create Oracle Trigger before insert of each row in employee table

```
CREATE OR REPLACE TRIGGER EMPLOYEE_ROW_ID_TRIGGER

BEFORE INSERT ON EMPLOYEE FOR EACH ROW

DECLARE

seq_no                                                    number(12);

BEGIN

select EMPLOYEE_ID_SEQ.nextval into seq_no from dual ;

:new                EMPLOYEE_ID                :=                seq_no;

END;
```

```
SHOW ERRORS;
```

80. Oracle Procedure 81. Oracle View

An example oracle view script is given below

```
create view Employee_Incentive as select FIRST_NAME,max(INCENTIVE_AMOUNT) INCENTIVE_AMOUNT from EMPLOYEE a, INCENTIVES b where a.EMPLOYEE_ID = b.EMPLOYEE_REF_ID group by FIRST_NAME
```

82. Oracle materialized view - Daily Auto Refresh

```
CREATE MATERIALIZED VIEW Employee_Incentive

REFRESH COMPLETE

START WITH SYSDATE

NEXT SYSDATE + 1 AS

select FIRST_NAME,INCENTIVE_DATE,INCENTIVE_AMOUNT from EMPLOYEE a, INCENTIVES b

where a.EMPLOYEE_ID = b.EMPLOYEE_REF_ID
```

83. Oracle materialized view - Fast Refresh on Commit

Create materialized view log for fast refresh. Following materialized view script wont get executed if materialized view log doesn't exists

```
CREATE MATERIALIZED VIEW MAT_Employee_Incentive_Refresh

BUILD IMMEDIATE

REFRESH FAST ON COMMIT AS

select FIRST_NAME,max(INCENTIVE_AMOUNT) from EMPLOYEE a, INCENTIVES b

where a.EMPLOYEE_ID = b.EMPLOYEE_REF_ID group by FIRST_NAME
```

84. What is SQL Injection ?

SQL Injection is one of the the techniques uses by hackers to hack a website by injecting SQL commands in data fields.