

* 6 months salary for all the employees

→ select, ename, package = (salary * 12) / 2 from employee

* SQL practice question - 1

① Display the details of all the employees.

→ select * from employee

② Display the name & dept for all employees

→ select Ename, dept from employee

③ Display the name & salary for all employees.

→ select Ename, salary from employee

④ Display the employee no. & total salary for all the employees.

→ select count(id) as total-employee, sum(salary) as total-salary from employee

⑤ Display the employee name and annual salary for all the employees.

→ select ename, package = (salary * 12) from employee

⑥ Display the employee names of all employees who are working in HR dept.

→ select ename, dept from employee where dept = 'HR'

⑦ Display the employee names of all employees who are working in 'HR' dept and salary is greater than 60000.

→ select ename, salary from employee where dept = 'HR' and salary > 60000

⑧ Display the employee number who are earning same salary.

→ select eid, ename, esal, rank() over (order by esal) from employee.

or

select ename from employee where esal in (select esal from employee group by esal having count(*) > 1)

⑨ Display the employee total salary being paid to all employee

→ select sum(salary) as total_salary from employee

⑩ Display the average salary from employee table.

→ select AVG(salary) as AVG_salary from employee

⑪ Display the names of the employee in order of salary i.e the name of employee earning lowest salary should be first.

→ select ename, esal from employee order by esal

⑫ Display the empno, ename, dept, salary sort the output first based on name within name by dept-no & within dept-no by salary.

→ select , ename, edept_no, esal from employee order by ename, edept-no, esal.

⑬ Display the name of the employee along with their annual salary (salary * 12). The name of the employee earning highest annual salary should appear first.

→ select ename, package = (salary * 12) from employee order by package desc

⑭ Display the names, salary, HRA, PF, DA, Total salary for each dept employees.

- The output should be in the order of total salary, HRA 15% salary, DA 10% salary, PF 5% of salary, total salary will be (salary + HRA + DA + PF)

→ select ename, esal, esal/100*15 as HRA, esal/100*10 as DA, esal/100*5 as PF, esal + esal/100*15 + esal/100*10 - esal/100*5 as total from employee

⑮ Display the dept numbers & total number of employees working in each dept?

→ select dept, count(eid) as total_employee, count(dept) as total_no-of-Dept from employee group by dept

⑯ Display the dept numbers and total salary for each dept?

→ select dept, count(dept) as No-of-employee, sum(salary) as total_salary from employee group by dept.

⑰ Display the dept numbers & total maximum salary for each dept.

→ select dept, count(dept) as No-of-Dept, sum(salary) as total_salary from employee group by dept.

⑱ Display the dept numbers & total salary for each dept whose employee count is more than 2?

→ select dept, count(eid) as total_employee, count(dept) as no-of-dept from employee group by dept having count(dept) > 2

⑲ Display the names of IT whose earn a salary more than highest salary of HR dept?

→ select ename, edept, esal from employee where edept = 'IT' and esal > (select max(esal) from employee where edept = 'HR')

more than मिलने की esal > भाषा being paid मिलने की esal in

* SQL practice questions - 2

① Display the name of employees who earn highest salary in their respective dept?

→ select * from employee E where esal = (select max(esal) from employee where edept-no = E.dept-no)

② Display the name of employees who are working in Account dept?

→ select ename, edept from employee where edept = 'Account'

③ Display the name of employees who are working in mumbai?

→ select ename, eloc from employee where eloc = 'mumbai'

✓④ Display the dept having total salary greater than the maximum salary for managers.

→ select employee.ename, employee.esal, manager.sal from employee, manager where employee.mgr = manager.empno and ass employee.esal > manager.esal

or

✓ select dept, sum(esal) from employee group by dept Having sum(esal) > (select max(esal) from employee where dept = 'manager')

⑤ How to find '-' within two names (for ex: name like praveen - patil)

→ select * from employee where ename like '%[-]%'

✓⑥ Display the maximum salary from being paid to finance dept from employee table?

→ select max(esal) from employee where dept = 'Finance'

* Display the maximum salary being paid in deptno = 20
→ select max(sal) from emp where deptno = 20

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→ select * from employee where edept = 'finance' and
esal in (select max(distinct esal) from employee
where edept = 'finance')

⑦ Display the minimum salary from being paid to
HR department from employee table?

→ select * from employee where edept = 'HR' and
esal in (select min(distinct esal) from employee
where edept = 'HR')

⑧ Display the Average salary drawn by manager
department from employee table.

→ select AVG(esal) as averagesal from employee
where edept = 'manager'

⑨ Display the maximum salary being paid to clerk.

→ select max(sal) from emp ~~from~~ where job = 'clerk'

* SQL tuff practice question set - 3

① Display the names of all the employees in
uppercase?

→ select UPPER(ename) from employee

② Display the names of ~~em~~ all the employees in lowercase

→ select LOWER(ename) from employee

③ Display the length of your name using appro-
priate function?

→ select len('Pallavi')

④ Display the length of all the employee table?

→

⑤ select the name of employee & employee id in a single column.

→ Conversion failed when converting the varchar value 'name' to data type int. eg.

select *, (ename + eid) as nameid from employee

↓
 {4} 311401 int+int / varchar+varchar 4 value
 {3} 21371 int+varchar & value error 21371+113.

⑥ Use appropriate function and extract 3 characters string starting from characters from the following string "SCODEEN" ie. o/p should be SCO.

→ select SUBSTRING('scodeen', 1, 3)

⑦ Find the first occurrence of character 'E' the following string "SCODEEN GLOBAL"

→ select CHARINDEX('E', 'SCODEEN GLOBAL')

⑧ Replace every occurrence of alphabet 'F' with 'E' in the following string "SCODFFN GLOBAL"

→ select Replace('SCODFFN GLOBAL', 'FF', 'EE')

⑨ display the information from employee table where name found "MANAGER" replace with "Boss"

→ select replace (JOB, 'MANAGER', 'BOSS') from Emp

⑩ Display your age in days ?

→ select DATEDIFF (DD, '1996/01/01', getdate()) as present_Age.

- ⑪ Display your age in months &
→ select DATEDIFF (Month, '1996/11/01', getdate ()) as present-age.
- ⑫ Display current date as 15th Aug 1990.
→ select Datediff (YEAR, '1990/08/15', getdate ()) as present-age.
- ⑬ Display current time &
→ GETDATE (&)
select GETDATE ()
- ⑭ Employee joined on 13th sept 1987 then what is the total service on current date?
→ select DATEDIFF (YEAR, '13 sep 1987', getdate ()) as total-service.
- ⑮ Display the date before 3 months (current date)
→ select convert (date, dateadd (month, -3, getdate ()))
- ⑯ Display the department which are unique in dept column.
→ select Distinct (Dept) from employee
- ⑰ Display the dept those employee whose name contain less than 4 characters.
→ Ename from employee where Len (ename) = 4
→ select
- ⑱ Display those employees whose salary is greater than 3000 after giving 25% increment.
→ select * from employee where $(1.25 * salary) > 3000$
Select, eid, ename, esal + (esal / 25) as Total salary from employee.

① select count of employees from each dept where count greater than 3.

→ select count(*), dept from employee group by dept having count(*) > 3

② Find the bottom 4 records from employee table?

→ select top 4 * from employee order by eid desc

or

select * from employee where eid > (select count(eid) from employee) - 4

* SQL practice question set - 4

① How will identify the table schema in a database?

→ select * from information - schema. tables

Diary
Hem.

② What is the difference between char & nchar?

→ Both char & nchar are fixed length string data types. But they have the following differences.

- CHAR full name is character.

- NCHAR full name is National character.

- By default, CHAR uses ASCII character set so 1 character is always stored as 1 byte.

- By default NCHAR uses unicode character set. NCHAR data are stored in UTF8 format so 1 character could be stored as 1 byte or upto 4 bytes.

- Both CHAR and NCHAR columns are defined with fixed length this in units of characters.

③ what is differ How to display the structure of the table?

→ SP_HELP employee

④ How to change or rename the column name in a table?

→ SP-Rename 'employee.contact no', 'mobilenos'

⑤ What is the age of your bank Account?

→ select Account_No, Account_Name, Datediff (YY, Acct-Open-Date, getdate ()) as Account_Age From Account details

⑥ calculate the no. of accounts which is opened during the current year?

→ select Account_No, Account_Name, Datediff (YY, Acct-Open-Date, getdate ()) as Account_Age, Count (*) from Account details

where

Datediff (YY, Acct-Open-Date, getdate ()) = 0

⑦ What is the difference between not null key & primary key?

→ primary key is a field or combination of field in a table which uniquely identifies each rows in the table.

- primary key column can't have null values.

- A table can't add more than one primary key.

Not Null constraint is restricts a column from having a 'Null value'.

- once if you defined / Applied NOT NULL constraints on column level then you can't insert NULL values.

⑧ What is the difference between unique & NULL key?

⑧ How many Null values we can insert into unique key column?

→ unique key column can have one NULL value.

⑨ Difference between primary key & foreign key.

→ primary key

foreign key.

- A primary key is used to ensure data in the specific column is unique.

- It uniquely identifies a record in the relational database table.

- only one primary key is allowed in a table.

- It does not allow NULL values.

- Its value cannot be deleted from the parent table.

- A foreign key is a column or group of columns in a relational database table that provides a link b/w data in 2 tables.

- It refers to the field in a table which is the primary key of another table.

- Whereas more than one foreign key are allowed in a table.

- It can also contain NULL values.

- Its value can be deleted from the child table.

⑩ what is the co-relation sub query & sub query?

→ co-related subquery: An independent query that uses the correlation name of another independent query. A sub-query that uses the correlation name of an outer query.

- sub query: sub query is basically an inner query which is found inside the outer query.

⑪ How to copy the data from one table into another table?

→ Insert into newtable
select * from oldtable

Insert into newtable (col1, col2, col3)
select column1, column2, column3 from
oldtable.

⑫ what is difference b/w DATEPART, DATENAME & DATEADD?

→ DATEPART: It is a datetime function which helps to extract information from date. This function always returns result as integer type.

DATENAME: It is also another datetime function which helps to extract information from date. This function always returns result as nvarchar (character string)

DATEADD: This function in SQL server is used to sum up a time or a date interval to a specified date, then returns the modified date.

⑬ what is the difference b/w CONCAT(), CONCAT with + and CONCAT_WS()? ?

→ Both CONCAT() and CONCAT_WS() functions are used to concatenate 2 or more strings but the basic difference b/w them is that CONCAT_WS() function can do the concatenation along with a separator between strings, whereas in CONCAT() function there is no concept of the separator.

store procedure is a set of SQL queries that can take input & send back output.

Ques Diary

→ (14) What is difference b/w Triggers & stored procedures. Triggers fired automatically once you perform any DML (Insert, update & delete) operation on table.

stored procedure are collection of SQL queries that can be saved & reuse whenever required.

Ques Diary

→ (15) What is the difference between view and store procedure?

→ view is logical/virtual table. on the result set of an SQL statement. The fields/columns in a view are fields/columns are one or more real tables in the database.

store procedure are collection of SQL queries that can be saved & reuse whenever required.

(16) What is the difference between clustered & non-clustered index?

→ Clustered Index: whenever you apply clustered indexing in a table, it will perform sorting in that only. store data physically according to the order.
- you can create only one clustered index in a table like primary key.

→ clustered index is as same as dictionary where the data is arranged by alphabetical order.

- In clustered index, index contains pointer to block but not direct data.

Non-clustered Index: Non-clustered Index is as same as similar to the index of a book.

- The similar index of a book consists of a chapter name & page number.

- If you want to read any topic or chapter then you can directly go to that page by using index of that book.

- No need to go through each & every page of a book.
- The data & non-clustered index index is stored separately, then you can have multiple non-clustered index in a table.
- The data is stored in one place & index is stored in another place.

Imp

clustered index

- ① clustered index requires less memory for operations.
- ② In clustered index, index is the main data
- ③ clustered index store pointers to block not data.

Non-clustered index

- ① Non-clustered index requires more memory for operations.
- ② In Non-clustered index, index is the copy of data.
- ③ Non-clustered index store both value & a pointer to actual row that holds data.

①7 ~~IF~~ Display the query increase employees salary 3000 of dept 'HR'

→ select *, esal = esal + 3000 from employee where dept = 'HR'

①8 Display the query ~~A~~ less employees salary 3000 of dept 'IT'

→ select *, esal = esal - 3000 from employee where dept = 'IT'

①9 How to take back up of table?

→ select * into backup_students from students to be backup

or

select * into emp_261021 from emp

or

select * into table_backup_name from table_name

(20) How can we insert selective records from one table into another table?

→ Insert into target (A, B, C)
 select A, B, C from source where A = 'some value'
 Eg.

Insert into set 1 (sid, sname)
 select sid, sname from set 2
 where sname = 'manish'

(21) How will you take the back up of database?

→ SQL Test 18 → Tasks → Backup
 or

click on database → click on task → click on back up → under destination confirm your path for backup.

(22) calculate the no. of accounts which is opened during the current year?

* → select acct-number, acct-name, acct-open-date,
 DATEDIFF (YY, acct-open-date, GETDATE ()) as account-age from Account-Details
 where
 DATEDIFF (YY, acct-open-date, GETDATE ()) = 0

(23) Is there a difference b/w a Null value & zero?

→ Yes! A Null value is the absence of the data/information. It has a quantitative character in that it represents the absence of the quantity. Simply put, Null in SQL means the value is unknown or missing; we don't know what the value is. on the other hand, zero means there is a value which equals, well, zero. Therefore, zero has a qualitative character.