

SQL Server Query Notes

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M.Tech.(CSE)

```
create database rgpg
use rgpg
use sachinsirohi
drop database RGPG
alter database RGPGcollege Modify Name=RGPG
EXEC sp_renamedb 'rgpg', 'RGPGcollege'
sp_rename computer, Computer5
sp_help
select host_id()
create table computer2
(
  ComputerName varchar(100),
  ComputerAddress varchar(200),
  Contact int
)
create table emptytable
(
  username varchar(100)
)

select * from dbo.computer
select ComputerName from dbo.computer
```

```

select ComputerName, computeraddress from
computer
select * from emptytable
select Computername as 'EmpName',computeraddress
as 'EmpAddress' from computer
select Computername 'EmpName1',computeraddress
'EmpAddress1' from computer
select 'EmpName2'=Computername
,'EmpAddress2'=computeraddress from computer
select Computername, 'Contact',computeraddress
from computer
select
Computername+'HCL'+computeraddress+'Hapur' as
Information from computer
insert into computer values('Sony Computer'
,'Baraut',105)
select computername,contact,calulating=contact%2
from computer
select * from computer where ComputerName='HP'
select * from computer where Contact=102 and
ComputerName='Accer' and
ComputerAddress='modinagar'
select * from computer where Contact !=101
select * from computer where Contact <>101
select computername,ComputerAddress,Contact from
computer where Contact not between 101 and 10000
select computername,ComputerAddress,Contact from
computer where computername not in('HP','Accer')
select * from computer where ComputerAddress
like '%nagar'
select * from computer where ComputerAddress
like 'Mee%'
select * from computer where ComputerAddress
like '_eerut'

```

```

select * from computer where ComputerAddress
like 'Modina__'
select * from computer where ComputerName
like '_ony_Compute_'
select * from computer where computername like
'[a-e][a-d]%'
select * from computer where computername is
NULL
select * from computer order by computername
desc
select top 4 computername, ComputerAddress from
computer
select distinct * from computer where
ComputerName like 'De%'
select distinct ComputerName from computer where
ComputerName like 'De%'

```

```

create table newtable
(
newvalue int default 0,
name char(20)not null,
haddress varchar(100) not null,
dob datetime not null,
salary float not null,
price money not null,
contact bigint not null
)
alter table newtable contact bigint not null
select * from newtable
insert into newtable
values (0, 'Hari', 'Meerut', '12/02/2015', 30000.50, 5
0.69,)

```

```

create table employee
(

```

```

emp_id varchar(20) not null primary key,
emp_name varchar(100)
)
select * from employee
insert into employee values('E105','Payal')
create table department
(
dept_Id varchar(20) not null primary key,
Dept_name varchar(100) null,
emp_id varchar(20) foreign key references
employee(emp_id)
)
select * from department
insert into department
values('D202','English','E102')
delete from department where emp_id='E102'
delete from employee where emp_id='E101'

create table prmy
(
u_id int primary key,
u_name varchar(100) not null
)
select * from prmy
insert into prmy values(102,'Sita')

create table forn
(
C_ID int primary key,
c_name varchar(100),
uu_id int foreign key references prmy(u_id)
)
select * from forn
insert into forn values(1003,'Wipro',102)
create table autonumber

```

```

(
  u_id int identity(101,1) primary key,
  u_name varchar(100) not null
)
select * from autonumber
insert into autonumber values ('Hari')

create table newtable1
(
  newtext char(6) primary key clustered
)
select * from newtable1

create table clust
(
  compt_id varchar(100) not null,
  compt_name varchar(100)
)
insert into clust values ('C102', 'Sony')
select * from clust

create unique clustered index abcd
on clust(compt_id)

create table friends
(
  friend_name char(4) not null
  constraint fr_frind primary key clustered
  check( friend_name in ('Ram', 'Ravi', 'Rita')
  or friend_name like ('AB[a-z][a-z]')),
  frnd_add varchar(50)
)
drop table friends
insert into friends values ('ABta', 'Modinagar')
select * from friends

```

```

create table person
(
p_ID int not null,
lastname varchar(255)not null ,
constraint pkperson primary key(p_ID,lastname),
addrs varchar(50)
)
alter table person add addrs2 varchar(50)unique
alter table person drop constraint pkperson
drop table person
select * from person
alter table person add unique(addrs)

insert into person
values(104,'sharma','Meerut1','mrt1')

create table [dbo].[EmployeeTable]
(
empname varchar(100),
addres varchar(100)not null,
salary bigint
)
insert into EmployeeTable
values('Sita','abcd',50000)
drop table [dbo].[EmployeeTable]
select * from [dbo].[EmployeeTable]
alter table [dbo].[EmployeeTable] add
check(salary>10000)
insert into EmployeeTable(empname,addres)
values('Sita','Meerut')
insert into EmployeeTable select
EmployeeTable2.empname2,addres2,salary2 from
EmployeeTable2

```

```

create table [dbo].[EmployeeTable2]
(
    empname2 varchar(100),
    addres2 varchar(100)not null,
    salary2 bigint
)
insert into EmployeeTable2
values('James','Washington',70000)
select * from EmployeeTable2 order by empname2
desc
select * from EmployeeTable2 order by addres2

select empname2,max(salary2)as 'Maximum
Salary',
min(salary2)as 'Minimum Salary',avg(salary2)
as'average Salary', sum(salary2)as 'Total
Salary'
from EmployeeTable2 group by empname2
having MAX(salary2)>=100000
select count(salary2)as 'total salary'
from EmployeeTable2

create table join1
(
    j_id bigint primary key,
    jname varchar(50),
    amount bigint
)
select * from join1
insert into join1 values(11,'Sita
kumari',4000,800)

create table join2
(
    j_id bigint primary key,

```

```

jnamee varchar(50),
amountt bigint
)
select * from join2
insert into join2 values(6, 'Ravi', 5800)

select * from join1, join2
where join1.j_id=join2.j_id

select * from join1 inner join join2 on
join1.j_id=join2.j_id

select * from join1 left join join2 on
join1.j_id=join2.j_id

select * from join1 left join join2 on
join1.jname=join2.jnamee

select * from join1 right join join2 on
join1.j_id=join2.j_id

select * from join1 inner join join2 on
join1.jname=join2.jnamee inner join
EmployeeTable2
on EmployeeTable2.empname2=join2.jnamee
select empname2+'.'+addres2 as Full_name from
EmployeeTable2

select * from join1 where j_id=101

update join1 set jname='Ram' where j_id=103
update join1 set amount=59000 where
jname='Sita'
update join1 set amount=9000 where j_id<>993

```



```

    update join1 set amount=8840 where jname
like 'R%'
    update join1 set amount=9840 where jname not
in
    ('Ram', 'Sita')

    update join1 set amount=6099 where amount
like
    '%20!%%' Escape '!'

    select jname from join1 group by jname having
sum(amount)>10000
    update join1 set jname='Ram Kumar' from
(select
    jname as myname from join1 group by jname
having sum(amount)
>10000) as myselect where
join1.jname=myselect.myname

    select jname as MyName from join1

    update join1 set jname='Rita' from (select
jnamee from join2 group by jnamee having
sum(amountt)
>10000) as j2 where join1.jname=j2.jnamee

    update join1 set jname='Rita' from (select
jnamee from join2 group by jnamee having
sum(amountt)
>10000) as a1 where join1.jname=a1.jnamee

    update join1 set
amount=join1.amount+join2.amountt
    from join1, join2 where join1.j_id=join2.j_id

```

```

update join1 set jname='Robert' where j_id=101

update join1 set jname='Robert' from (select
join1.j_id,join2.jnamee from join1 inner join
join2
on join1.j_id=join2.j_id)as myselect where
join1.jname=myselect.jnamee

select * from join1
select * from join2

delete from join2 where j_id=450
delete from join2
truncate table join1

alter table friends add salary bigint
select * from friends
insert into friends(salary) values(500000)
update friends set salary=45000 where
friend_name='ravi'

select friend_name from friends group by
friend_name
having SUM(salary)>46000

delete friends from friends where friend_name
in
( select friend_name from friends group by
friend_name having SUM(salary)>=46000)

select * from employee
select * from employee where exists( select *
from employee where employee.emp_id='E101')
insert into employee values(2,'Ram')

```

```

select * from join1
select * from join2
select * from employee where exists (Select *
from
    join1 inner join join2 on
join1.jname=join2.jnamee
    where join1.jname=employee.emp_name)

select j_id,jname from join1 where j_id in(
select j_id from join2 where j_id=3)

select j_id,jname from join1 where jname<>all
(select jnamee from join2)

select j_id,jname from join1 where jname=any
(select jnamee from join2)

select j_id,jname from join1 where jname=some
(select jnamee from join2)

select * from join1 where amount like '_0%'

select * from join1 where amount like '20%'

update join1 set amount=5000 where jname like
'p%'
select amount,ISNULL (amount,$0.00) from join1
insert into join1(j_id,jname) values(10,'gita')

select * from join1 where amount is null
select * from join1 where amount is not null
select * from join1 where amount = null

select * from join1 where amount between 2000
and 8000

```

```

select distinct jname from join1
select j_id+amount from join1
select j_id*amount from join1
select (amount+100)/10 from join1
select amount*(10+50) from join1

alter table join1 add salary bigint
update join1 set salary=5000

select count(distinct jname) as 'total name
row', count(amount)
from join1
select count(all jname) from join1
select count(*) from join1

select sum(amount) from join1
select avg(amount) from join1
select max(amount) from join1
select min(amount) from join1
select 'jhon'+ 'son' returns from join1

select replace (jname, 'hari', 'B'), jname from
join1
select upper(jname) from join1
select lower(jname) from join1
select substring(jname,1,2) from join1
select INSTR(jname, 'S',1,5) from join1

SELECT LTRIM(jname) from join1

select * from join1
insert into join1(j_id,amount) values(23,65)
SELECT ltrim(rtrim(Left(jname,4))) from join1

select ltrim(rtrim(' Word ')) as UserName

```

```

select ascii('A'),ascii('a')
select len(jname) from join1
select len('Word') from join1
select len('Word')
select * from join1 where jname is null
select char(65)
select stuff('weather',3,2,'-Compter-')
select substring('Computer',2,3)
select reverse('Computer')
select patindex('%c%', 'Tcomcruize')
select charindex('l','hello')

select str2='hello',str(123)as str1
select pay=str(amount) from join1
select char(65)
select integer(j_id) from join1
select pay=amount, payrt=str(amount) from join1
select pay=amount, payrt=char(amount) from
join1

select j_id+amount from join1
select 'hello '+'word '+jname from join1
select getdate()
select dateadd(month,4,getdate())
select dateadd(year,4,getdate())
select dateadd(day,6,getdate())
select datepart(yy,getdate())as'dat part
values'
select datepart(mm,getdate())as'dat part
values'
select datepart(dd,getdate())as'dat part
values'
select
datename(month,getdate())as'DateNameValues'
select datename(yy,getdate())as'DateNameValues'

```

```

select datename(dd,getdate()) as 'DateNameValues'
select datediff(mm,getdate(),'2015-09-
17') as 'DateDiffValues'
select datediff(dd,getdate(),'2015-04-
17') as 'DateDiffValues'
select datediff(yy,getdate(),'2019-04-
17') as 'DateDiffValues'
select day('2015-04-15')
select month('2015-04-15')
select year('2015-04-15')
select cast(salary as bigint ) from join1
select ('2015-01-15','month dd yyyy' )
select getutcdate()
select * from join1
select jname,j_id from join1 group by
j_id,jname
select sum(amount),j_id,jname from join1 where
amount>1000 group by j_id,jname
select jname,j_id,max(amount) from join1 where
amount>1000 group by j_id,jname
select count(*) from join1

select jname,sum(amount) from join1 group by
jname
select salary,sum(amount) from join1 group by
salary
select jname,sum(amount) from join1 where jname
in
('sita','gita') group by jname order by jname
asc

select j_id,salary from join1 union
select j_id,sum(amount) from join1 group by
j_id,amount

```

```
select j_id,salary from join1 union
select j_id,salary from join1 group by
j_id,salary
```

```
select j_id,salary from join1 union
select j_id,amountt from join2 group by
j_id,amountt
```

```
select jname,sum(j_id),sum(salary)as 'salary'
from
join1 group by jname
```

```
select jname,sum(j_id),count(*) from join1 group
by
jname order by 1
select jname,sum(j_id),count(*) from join1 group
by
jname having sum(j_id)=2
select jname,j_id,count(*) from join1 where
j_id between 5 and 20 group by jname,j_id having
j_id between 10 and 20 order by j_id
```

self equality join

```
select join1.j_id,join2.jnamee from join1,join2
where join1.j_id=join2.j_id
```

Natural join

```
select join1.*,join2.j_id from join1,join2
where join1.j_id=join2.j_id
```

```
select jname,jnamee from join1,join2
where join1.j_id=join2.j_id
```

```
inner join
select jname,jnamee from join1 inner join join2
on join1.j_id=join2.j_id
```

```
left outer join
select join1.jname,join2.jnamee from join1 left
outer
join join2 on join1.j_id=join2.j_id
```

```
right outer join
select join1.jname,join2.jnamee from join1 right
outer
join join2 on join1.j_id=join2.j_id
where join2.amountt=5000
```

```
full outer join
select join1.jname,join2.jnamee from join1 full
outer
join join2 on join1.j_id=join2.j_id
```

```
cross join
select join1.jname,join2.jnamee from join1 cross
join join2
select join1.jname,join2.jnamee from join1,join2
```

```
equi join
select * from join1 join
join2 on join1.j_id=join2.j_id
```

```
self join using alias
```

```
select a.j_id,a.jnamee,b.j_id,b.jnamee from
join2 a,join2 b where a.j_id=b.j_id
```



```
select * from join1
select * from join2
```

```
desc join1
```

```
select
```

```
a.j_id,a.jname,a.amount,b.j_id,b.jnamee,b.amount
t
```

```
from join1 a join join2 b on a.j_id=b.j_id and
a.amount=b.amountt
```

```
select join1.j_id,join2.j_id from join1,join2
```

```
select j_id,amount from join1 where
```

```
jname=(select
```

```
jnamee from join2 where in jnamee='Sita')
```

Experiment

```
select join1.j_id,join1.amount from join1,join2
where
```

```
join1.jname=(select join2.jnamee from
join1,join2 where
```

```
join1.jname=join2.jnamee)
```

```
select j_id,amount from join1 where
```

```
jname=(select
```

```
jnamee from join2 where jnamee=(select jname
from
```

```
join1 where jname='Ram'))
```

```
select * from join1 where jname
```

```
in('sita','gita','ram')
```

```
select * from join2
```

```
insert into join2 values(4,'Ram',4004)
```

```
insert into join2 select j_id,jname,amount from
join1
where j_id=11
```

```
insert into join2 select a.j_id,a.jname,b.amount
from join1 a,join3 b where a.j_id=b.j_id and
b.amount<(select amount from join3 where
j_id=101)
```

```
create table join3
(
j_id bigint primary key,
jname nvarchar(100)not null,
amount bigint not null
)
insert into join3 values (4,'Gulfasha',6000)
select * from join3
update join3 set jname='Ram' where j_id=5
update join3 set jname='Shabana' where j_id in(
select j_id from join2 where jname='Ram')

delete from join3 where j_id=101
delete from join3 where j_id in(select j_id from
join2
where j_id>5)
```

```
select j_id,jname from join1 where j_id
in(select
a.j_id from join2 a,join3 b where a.j_id=b.j_id
and
a.jname in(select c.jname from join1 c where
j_id<50))
```

```
select max(j_id),count(*) from join1
```

```

select stdev(amount) from join1
select stdevp(amount) from join1
select var(j_id) from join1
select varp(j_id) from join1

```

```

select * from join1
select abs((-5)+17)
select abs(-17.455)
select acos(-1.00)

```

```

with att as(select
jname,amount,row_number()over(partition by
jname,amount order by amount )as NoOfRow from
join1)
delete from att where NoOfRow=2

```

```

create view abc as
select jname,jnamee from join1,join2 where
jname=jnamee

```

Multiple Table not update

```

update abc set jname='Tom cruize',jnamee='Tom
cruize2'
where jname='Ram'

```

```

single Table update
update abc set jname='Tom cruize'
where jname='Ram'

```

```

select * from abc

```

```

alter view abc as

```

```
select a.jname,b.jnamee from join1 a,join2 b
where
a.j_id=b.j_id
```

```
drop view abc
sp_rename abc,abc2
```

```
EXEC sp_RENAME 'join1.jnamee',
'jname'
select * from join1
```

```
delete ate from (select
jname,amount,row_number() over
(partition by jname,amount order by amount ) as
NoOfRow from join1)ate where ate.NoOfRow=2
```