

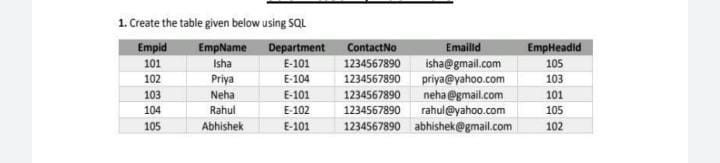
**Luminar SQL\_Assignments:**

Student\_name: Manu K Shibu

Batch: ST NOV 2024 B1 Rakhi 2 pm-4pm

**Assignment\_1:**

Print the table?



---Assignment-1-----

**CODE:**

create database assignment

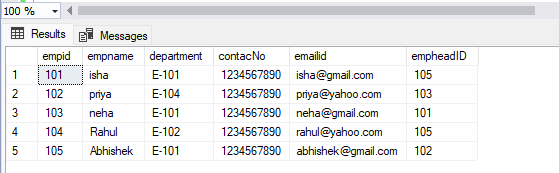
use assignment

create table employement1(empid int,empname varchar(10),department varchar(10),contacNo bigint,emailid varchar(30),empheadID int)

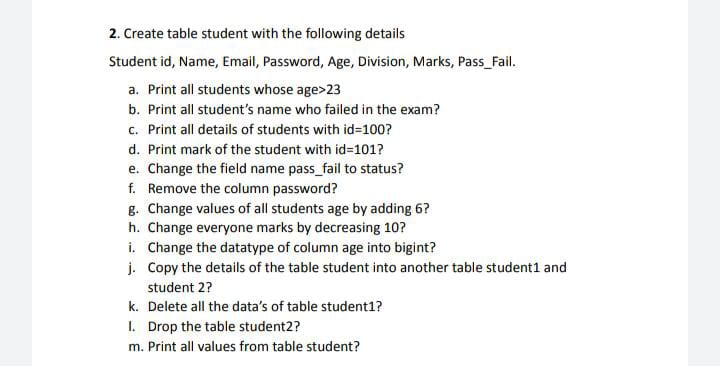
insert into employement1 values(101,'isha','E-101',1234567890,'isha@gmail.com',105),(102,'priya','E-104',1234567890,'priya@yahoo.com',103),(103,'neha','E-101',1234567890,'neha@gmail.com',101),(104,'Rahul','E-102',1234567890,'rahul@yahoo.com',105),(105,'Abhishek','E-101',1234567890,'abhishek@gmail.com',102)

select \* from employement1

**Output:**

****

**Assignment\_2:**



**CODE:**

---Assignment-2-----

create table student(Sudentid int,studentname varchar(10),email varchar(20),password varchar(10),age int,division varchar(5),marks bigint,pass\_fail varchar(10))

insert into student values(100,'manu','manu@gmail.com','aswe',21,'A',100,'PASS')

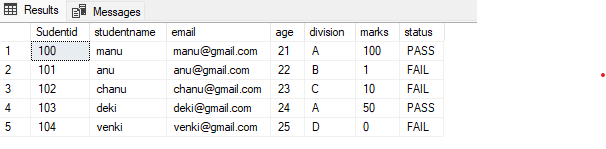
insert into student values(101,'anu','anu@gmail.com','asw55e',22,'B',1,'FAIL')

insert into student values(102,'chanu','chanu@gmail.com','asw44e',23,'C',10,'FAIL')

insert into student values(103,'deki','deki@gmail.com','aswe4',24,'A',50,'PASS')

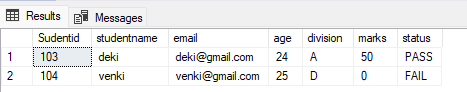
insert into student values(104,'venki','venki@gmail.com','as4we',25,'D',0,'FAIL')

select \* from student



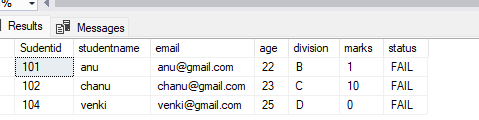
--a--

select \* from student where age>23



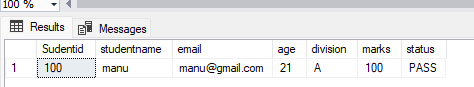
--b--

select \* from student where pass\_fail='FAIL'



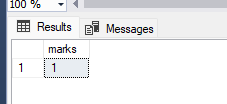
--c--

select \* from student where Sudentid=100



--d--

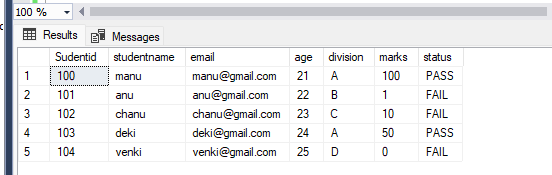
select marks from student where Sudentid=101



--e--

sp\_rename 'student.pass\_fail','status','column'

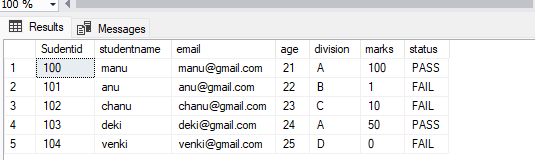
select \* from student



--f--

alter table student drop column password

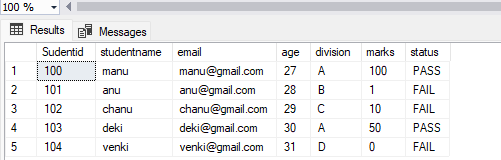
select \* from student



--g--

update student set age+=6

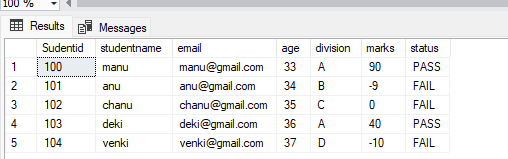
select \* from student



--h--

update student set marks-=10

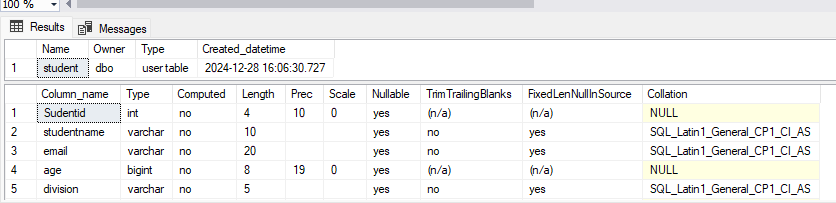
select \* from student



--i--

alter table student alter column age bigint

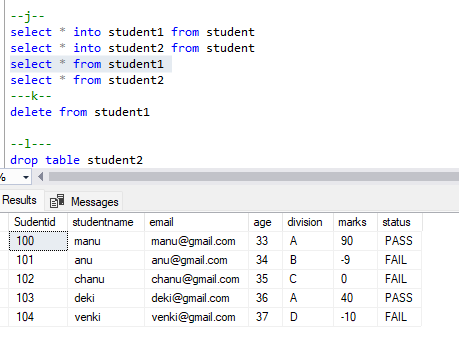
sp\_help student



--j--

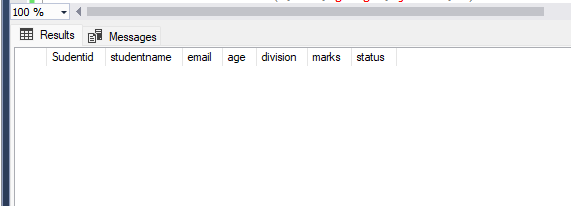
select \* into student1 from student

select \* into student2 from student



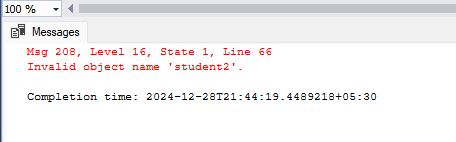
---k--

delete from student1



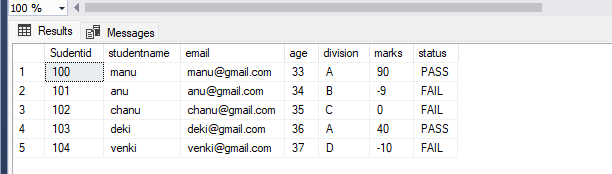
--l---

drop table student2

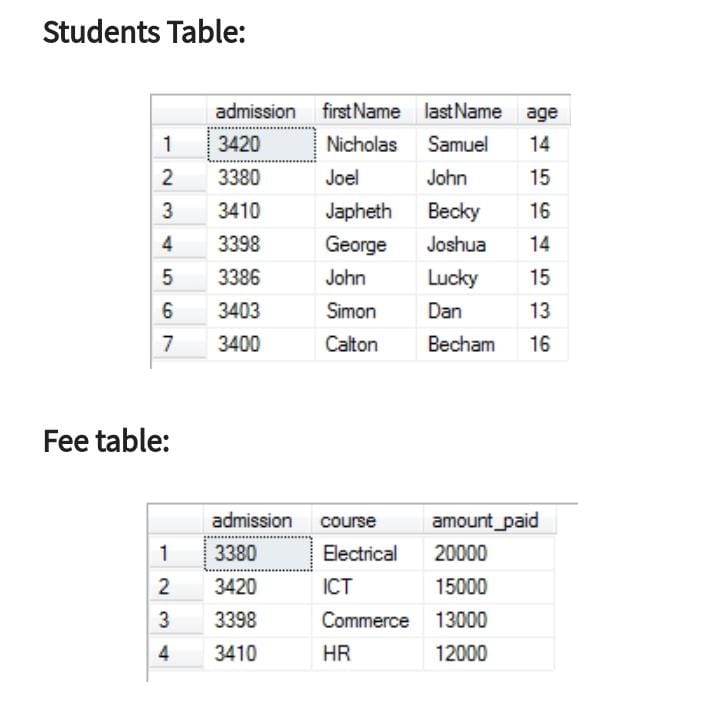


---m---

select \* from student



**ASSIGNMENT\_3:**

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1. Use joins methods and print left/right/inner/full join.

**CODE:**

----Assignment3---

create table studentstable(slno int,admission bigint,firstname varchar(10),lastname varchar(10),age int)

create table feetable(slno int,admission bigint,course varchar(20),amount\_paid bigint)

insert into studentstable values(1,3420,'nicholas','samuel',14)

insert into studentstable values(2,3380,'joel','john',15)

insert into studentstable values(3,3410,'japheth','becky',16)

insert into studentstable values(4,3398,'george','joshua',14)

insert into studentstable values(5,3386,'john','lucky',15)

insert into studentstable values(6,3403,'simon','dan',13)

insert into studentstable values(7,3400,'calton','becham',16)

select \* from studentstable

insert into feetable values(1,3380,'Electrical',20000)

insert into feetable values(2,3420,'ICT',15000)

insert into feetable values(3,3398,'Commerce',13000)

insert into feetable values(4,3410,'HR',12000)

Select \* from feetable

select studentstable.firstname,studentstable.lastname,feetable.course from studentstable inner join feetable on studentstable.admission=feetable.admission

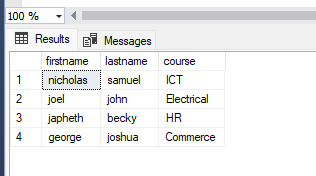
select studentstable.firstname,studentstable.lastname,feetable.course from studentstable left join feetable on studentstable.admission=feetable.admission

select studentstable.firstname,studentstable.lastname,feetable.course from studentstable right join feetable on studentstable.admission=feetable.admission

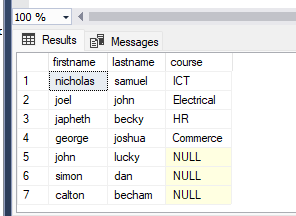
select studentstable.firstname,studentstable.lastname,feetable.course from studentstable full join feetable on studentstable.admission=feetable.admission

**OUTPUT:**

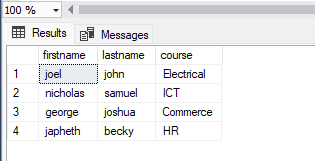
Inner\_join:



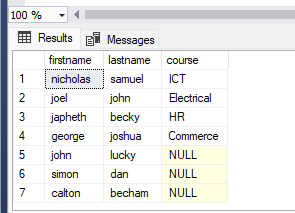
Left\_join:



Right\_join:



Full\_join:



**ASSIGNMENT-4:**

---not null---(without assigning in the create table section)

drop table if exists emp

CREATE TABLE emp (

id INT,

name VARCHAR(20),

pass VARCHAR(10),

mob BIGINT

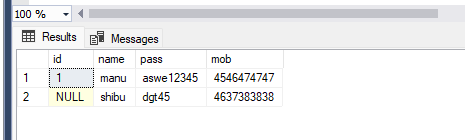
);

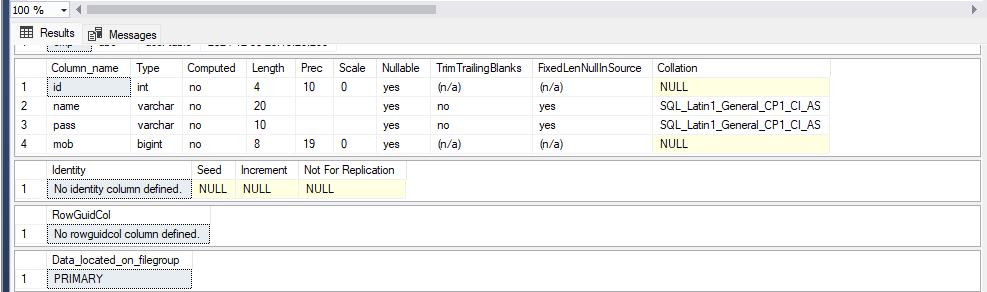
insert into emp values(1,'manu','aswe12345',4546474747)

insert into emp values(null,'shibu','dgt45',4637383838)

select \* from emp

sp\_help emp2





---not null---(assigning in the create table section)

drop table if exists emp

CREATE TABLE emp (

id INT not null,

name VARCHAR(20),

pass VARCHAR(10),

mob BIGINT

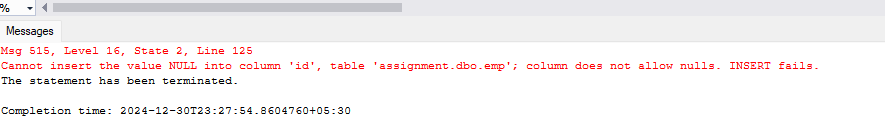
);

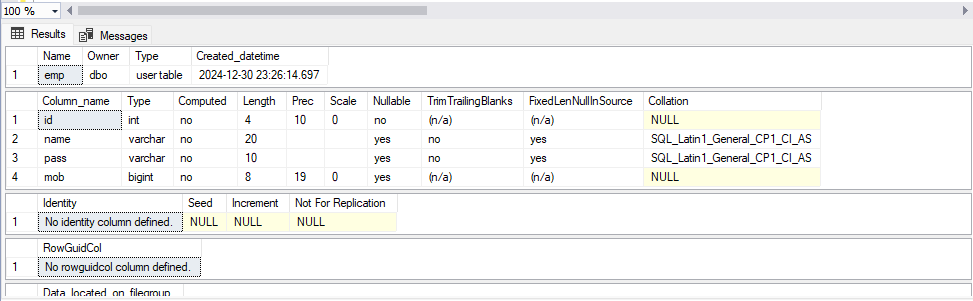
insert into emp values(1,'manu','aswe12345',4546474747)

insert into emp values(null,'shibu','dgt45',4637383838)

select \* from emp

sp\_help emp





---not null---(Add constraints to existing table)

drop table if exists emp

CREATE TABLE emp (

id INT not null,

name VARCHAR(20),

pass VARCHAR(10),

mob BIGINT

);

insert into emp values(1,'manu','aswe12345',4546474747)

insert into emp values(100,'shibu','dgt45',4637383838)

select \* from emp

sp\_help emp

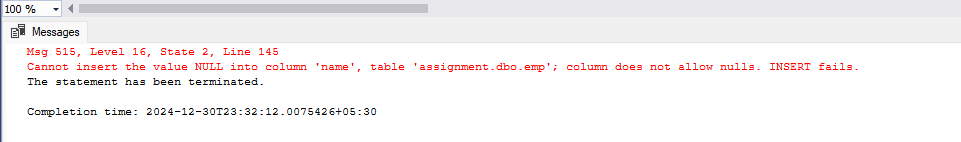
---make name also not null---

alter table emp alter column name varchar(20) not null

insert into emp values(100,null,'dgt45',4637383838)

insert into emp values(100,'ko','dgt45',4637383838)

select \* from emp

sp\_help emp

---unique---

---without assigning in the table section---

drop table if exists emp2

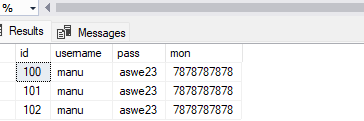
create table emp2(id int,username varchar(20),pass varchar(10),mon bigint)

insert into emp2 values(100,'manu','aswe23',7878787878)

insert into emp2 values(101,'manu','aswe23',7878787878)

insert into emp2 values(102,'manu','aswe23',7878787878)

select \* from emp2



---unique assigning in the table section---

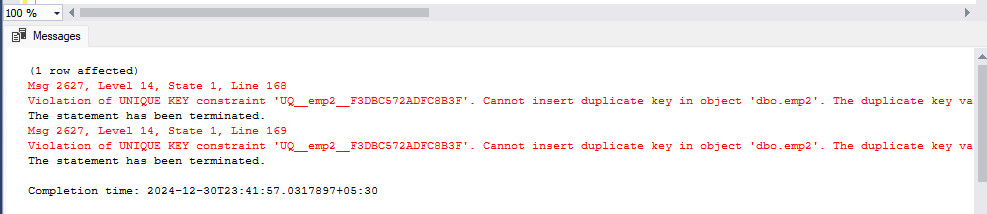
drop table if exists emp2

create table emp2(id int,username varchar(20) unique,pass varchar(10),mon bigint)

insert into emp2 values(100,'manu','aswe23',7878787878)

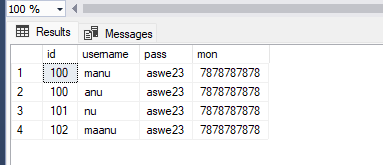
insert into emp2 values(101,'manu','aswe23',7878787878)

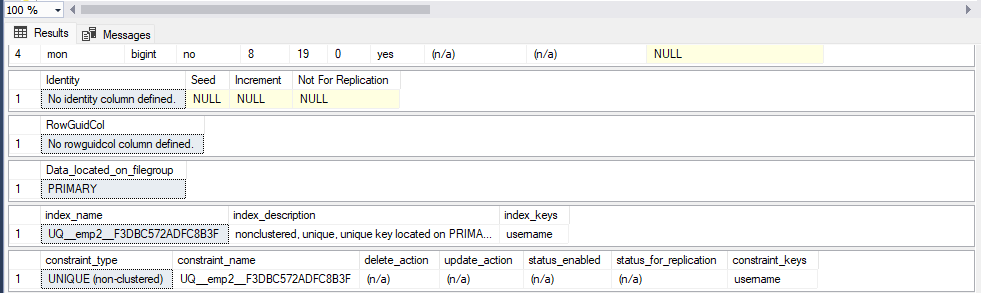
insert into emp2 values(102,'manu','aswe23',7878787878)



select \* from emp2

sp\_help emp2



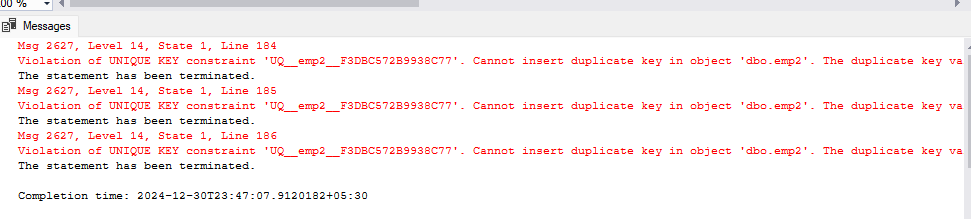


alter table emp2 add constraint uniquecons unique(id)

insert into emp2 values(100,'anu','aswe23',7878787878)

insert into emp2 values(100,'nu','aswe23',7878787878)

insert into emp2 values(100,'maanu','aswe23',7878787878)



---unique (Add constraints to existing table)---(make unique ID)

drop table if exists emp2

create table emp2(id int,username varchar(20),pass varchar(10),mon bigint)

insert into emp2 values(100,'anu','aswe23',7878787878)

insert into emp2 values(101,'nu','aswe23',7878787878)

insert into emp2 values(102,'maanu','aswe23',7878787878)

select \* from emp2

sp\_help emp2

alter table emp2 add constraint uniqueconss unique(id)

alter table emp2 add constraint uniq unique(username)

--contains duplicate values--

insert into emp2 values(100,'anu','aswe23',7878787878)

insert into emp2 values(100,'nu','aswe23',7878787878)

insert into emp2 values(100,'maanu','aswe23',7878787878)

--contains non-duplicate values---

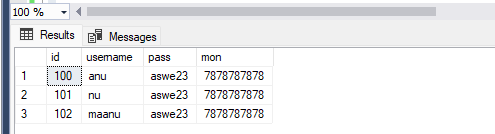
insert into emp2 values(100,'anu','aswe23',7878787878)

insert into emp2 values(101,'nu','aswe23',7878787878)

insert into emp2 values(102,'maanu','aswe23',7878787878)

select \* from emp2

alter table emp2 drop constraint uniquecons,uniqueconss



--check--

---(without assigning in the create table section)

drop table if exists salart45

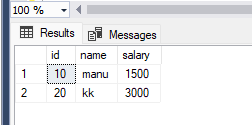
create table salary45(id int,name varchar(20),salary int)

insert into salary45 values(10,'manu',1500)

insert into salary45 values(20,'kk',3000)

select \* from salary45

sp\_help salary45



---check---(assigning in the create table section)

drop table if exists salary455

create table salary455(id int,name varchar(20),salary int check(salary>2500))

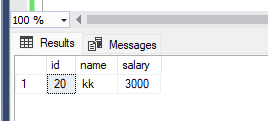
insert into salary455 values(10,'manu',1500)

insert into salary455 values(20,'kk',3000)

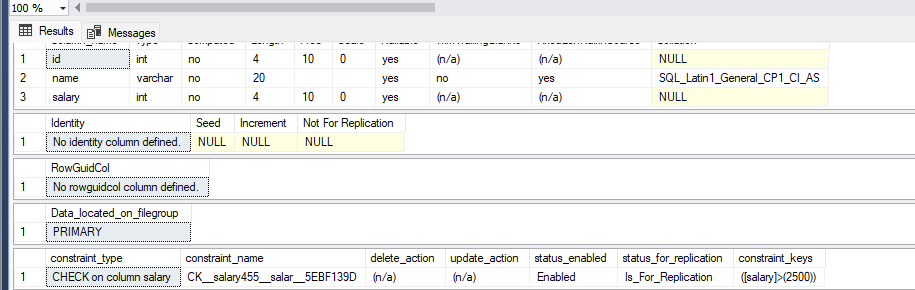
insert into salary455 values(10,'manu',2000)

insert into salary455 values(20,'kk',2400)

select \* from salary455



sp\_help salary455



---check---(Add constraints to existing table)

drop table if exists salary455

create table salary455(id int,name varchar(20),salary int check(salary>2500))

insert into salary455 values(10,'manu',3500)

insert into salary455 values(20,'kk',3000)

insert into salary455 values(10,'manu',3300)

insert into salary455 values(20,'kk',2400)

select \* from salary455

sp\_help salary455

alter table salary455 add age int

ALTER TABLE salary455 ADD CONSTRAINT ageconst CHECK(age>28)

insert into salary455 values(10,'manu',3500,25)

insert into salary455 values(20,'kk',3000,28)

insert into salary455 values(10,'manu',3300,30)

select \* from salary455

sp\_help salary455

---drop constraint---

sp\_help salary455

alter table salary455 drop constraint CK\_\_salary455\_\_salar\_\_60A75C0F

alter table salary455 drop constraint CK\_\_salary455\_\_salar\_\_693CA210

---default-

---(without assigning in the create table section)---

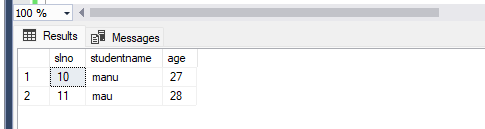
drop table if exists manu200

create table manu200(slno int,studentname varchar(20),age int)

insert into manu200 values(10,'manu',27)

insert into manu200 values(11,'mau',28)

select \* from manu200



---default---(assigning in the create table section)

drop table if exists manu200

create table manu200(slno int,studentname varchar(20),age int default 22)

--3 ways assign---

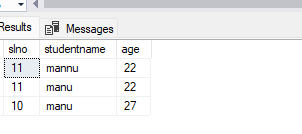
insert into manu200 values(10,'manu',27) ---(we can assign our own value)

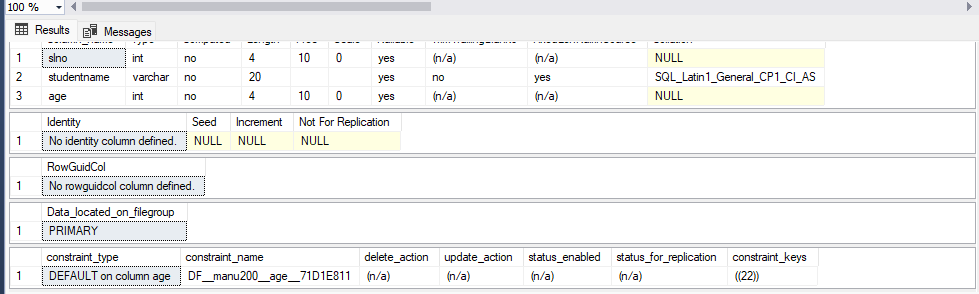
insert into manu200 values(11,'manu',default) ---(we can give default so that it will take default value)

insert into manu200 (slno,studentname)values(11,'mannu') --(we can give only other fields where default field will assign automatically)

select \* from manu200

sp\_help manu200





---default---(Add constraints to existing table)

drop table if exists manu200

create table manu200(slno int,studentname varchar(20),age int default 22)

insert into manu200 values(10,'manu',27) ---(we can assign our own value)

insert into manu200 values(11,'manu',default) ---(we can give default so that it will take default value)

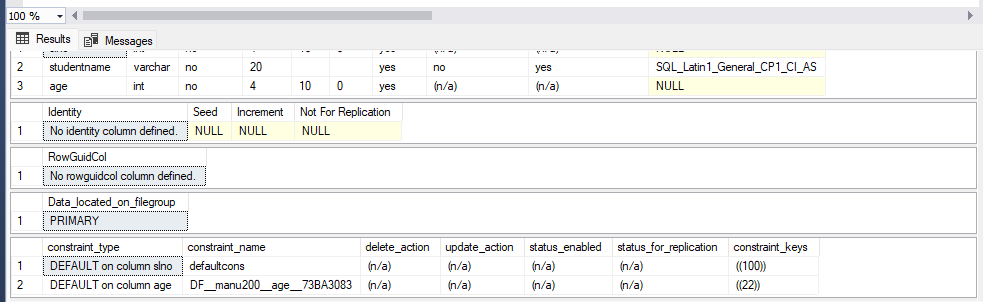
insert into manu200 (slno,studentname)values(11,'mannu') --(we can give only other fields where default field will assign automatically)

select \* from manu200

sp\_help manu200

alter table manu200 add constraint defaultcons default 100 for slno

sp\_help manu200



alter table manu200 add constraint defaultcons default 100 for slno

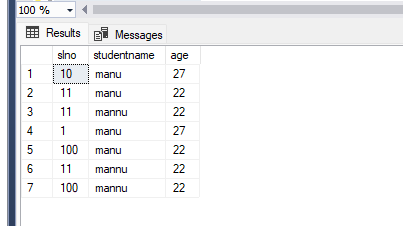
sp\_help manu200

insert into manu200 values(1,'manu',27) ---(we can assign our own value)

insert into manu200 values(default,'manu',default) ---(we can give default so that it will take default value)

insert into manu200 (slno,studentname)values(11,'mannu') --(we can give only other fields where default field will assign automatically)

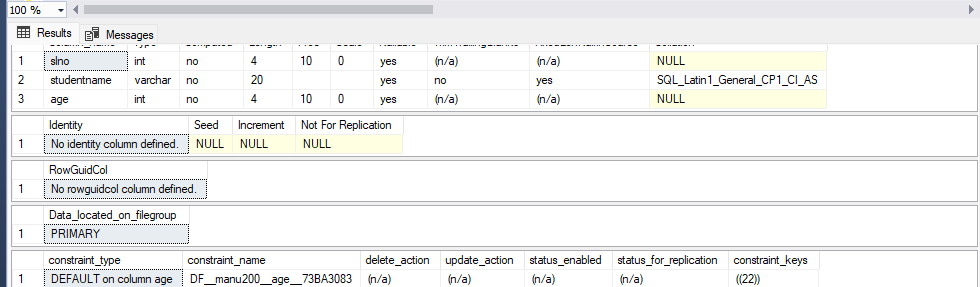
select \* from manu200



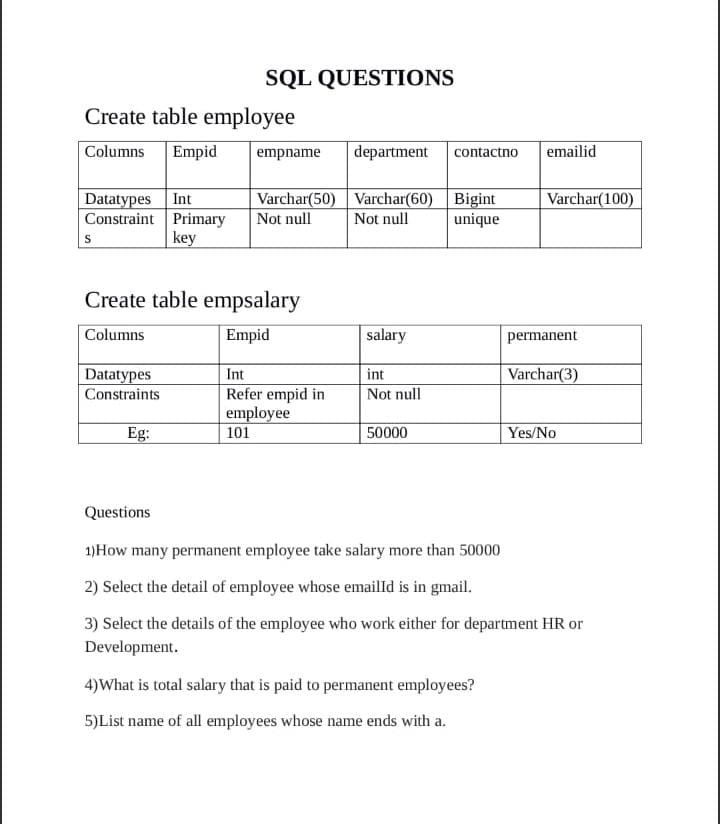
---drop constraint---

sp\_help manu200

alter table manu200 drop constraint defaultcons



**ASSIGNMENT\_5:**



----Assignment-5----

drop table if exists employee

create table employee(empid int primary key,empname varchar(20) not null,department varchar(60) not null,contact bigint unique,emailid varchar(100))

drop table if exists empsalary

create table empsalary(empid int foreign key references employee(empid),salary int not null,permanent varchar(3))

insert into employee values(101,'manu','bca',8787878789,'manukshibu@gmail.com')

insert into employee values(102,'anu','bcom',3387878789,'makshibu@gmail.com')

insert into employee values(103,'rakhi','mba',8787899789,'mashibu@gmail.com')

insert into employee values(104,'hi','mba',8789789,'mashibu@yahoo.com')

insert into employee values(105,'rakhi','bba',87879789,'mashibu@ori.com')

insert into employee values(106,'kkhi','HR',878797809,'masu@ori.com')

insert into employee values(107,'gkhi','Developemnt',687879789,'shibu@ori.com')

insert into employee values(109,'gkhi','Deopemnt',6890979789,'shiu@ori.com')

insert into employee values(110,'gkha','Deemnt',3290979789,'shiu@ori.com')

insert into employee values(112,'gkhaa','HR',1290979789,'shiu@gmail.com')

select \* from employee

insert into empsalary values(101,60000,'yes')

insert into empsalary values(102,40000,'yes')

insert into empsalary values(103,50000,'yes')

insert into empsalary values(103,50000,'no')

select \* from empsalary

----1----

select COUNT(\*) from empsalary where permanent='yes' and salary>50000

---2---

select \* from employee where emailid like '%gmail.com%'

---3---

SELECT \*

FROM employee

WHERE department = 'hr' OR department = 'Development';

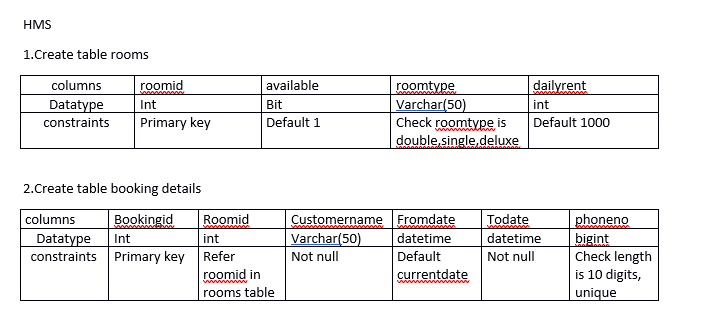
---4---

select max(salary) from empsalary where permanent='yes'

---5--

select \* from employee where empname like '%

**ASSIGNMENT\_6:**



---Assignment\_6----

drop table if exists rooms

create table rooms(roomid int primary key,available bit default 1,roomtype varchar(50) check (roomtype in('double','single','delux')),dailyrent int default 1000)

---insert values--

insert into rooms values(100,default,'DOUBLE',default)

insert into rooms values(101,default,'single',default)

insert into rooms values(102,default,'delux',default)

insert into rooms values(103,default,'single',default)

insert into rooms values(104,default,'DOUBLE',default)

select \* from rooms

sp\_help rooms

drop table if exists bookingdetails

create table bookingdetails(bookingid int primary key,roomid int foreign key references rooms(roomid),customername varchar(50) not null,fromdate datetime default getdate(),todate datetime not null,phoneno bigint unique CHECK(LEN(CAST(phoneno AS VARCHAR)) = 10))

----insert values----

insert into bookingdetails values(1005,100,'manu',default,'12/12/2024',6467676767)

insert into bookingdetails values(1001,101,'manu',default,'12/12/2024',6767645767)

insert into bookingdetails values(1002,102,'manu',default,'12/12/2024',6767666767)

insert into bookingdetails values(1003,103,'manu',default,'12/12/2024',6767688767)

insert into bookingdetails values(1004,104,'manu',default,'12/12/2024',6769976767)

select \* from bookingdetails

sp\_help bookingdetails

---without giving primary key----

insert into bookingdetails (bookingid,customername,fromdate,todate,phoneno) values(1200,'manu',default,'03/13/1997',7878784536)

select \* from bookingdetails

**ASSIGNMENT-7:**



---name groip salary sum find---

drop table if exists students

create table students(slno int,name varchar(10),salary bigint,age bigint)

insert into students values(1,'harsh',2000,19)

insert into students values(2,'dhanaraj',3000,20)

insert into students values(3,'ashish',1500,19)

insert into students values(4,'harsh',3500,19)

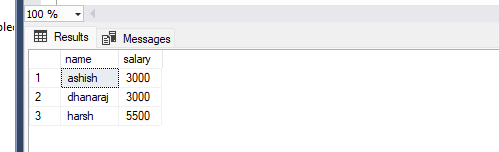
insert into students values(5,'ashish',1500,19)

select \* from students

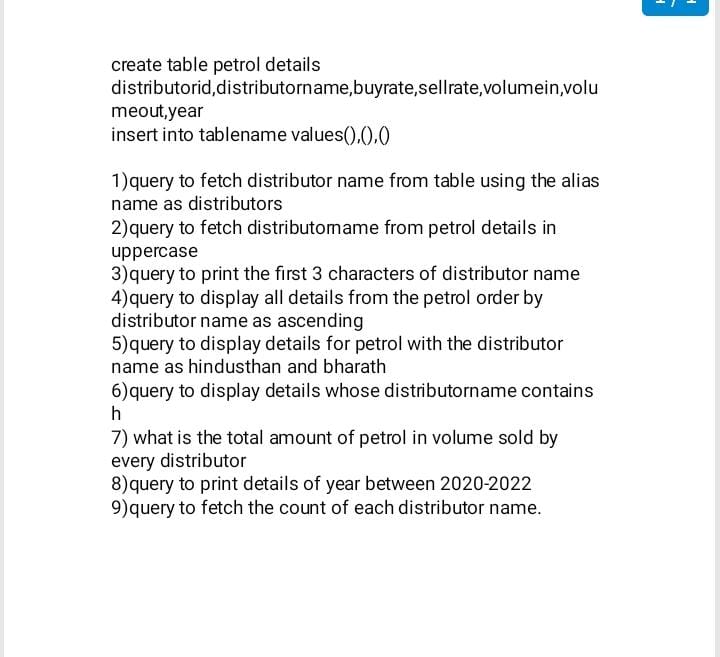
---name groip salary sum find---

select sum(salary) as salary,name from students group by name

SELECT name, SUM(salary) AS salary FROM students GROUP BY name



**Assignment-8:**



----Assignment\_7

drop table if exists petrol

create table petrol(distributorid int,distributorname varchar(20),buyrate bigint,sellrate bigint,volumein float,volumeout float,year date)

insert into petrol values(10,'jio',1000,900,10.2,10.3,'03/05/2022')

insert into petrol values(11,'jio',2000,500,10.2,10.3,'03/05/2022')

insert into petrol values(12,'bharat',3000,800,10.2,10.3,'03/05/2022')

insert into petrol values(13,'hp',1000,900,10.2,10.3,'03/05/2022')

insert into petrol values(14,'bharat',3000,200,10.2,60.3,'03/05/2022')

insert into petrol values(15,'hp',1000,900,10.2,10.3,'03/05/2022')

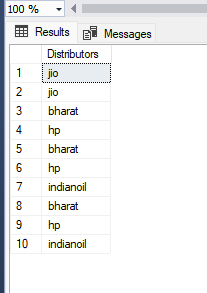
insert into petrol values(16,'indianoil',10000,9000,129.8,100.9,'03/05/2022')

select \* from petrol

--1

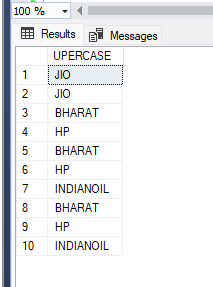
SELECT distributorName AS Distributors

FROM petrol;



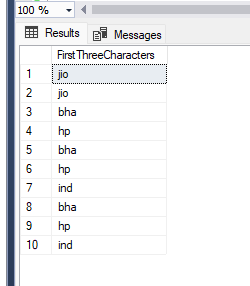
--2

select upper(distributorName) AS UPERCASE from petrol



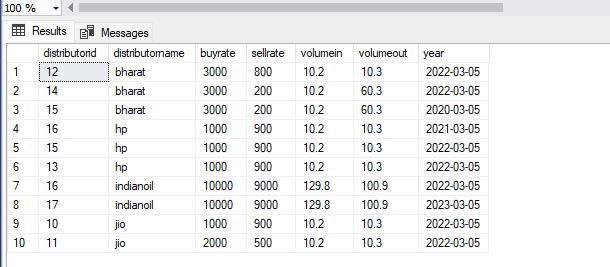
---3

SELECT LEFT (distributorName,3) AS FirstThreeCharacters from petrol



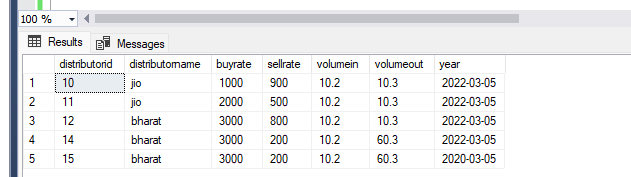
--4

select \* from petrol order by distributorname asc



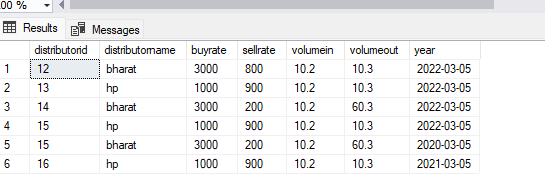
--5

SELECT \* from petrol where distributorname in ('jio','bharat')



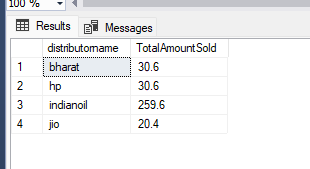
--6--

select \* from petrol where distributorname like '%h%'



--7

select sum(volumein) as totalsold from petrol



SELECT distributorname, SUM(volumein) AS TotalAmountSold FROM Petrol GROUP BY distributorName

select \* from petrol

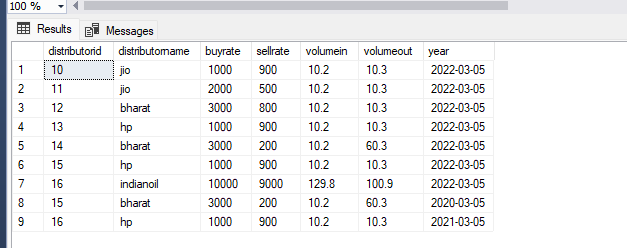
--8

SELECT \* FROM petrol WHERE year(year) BETWEEN 2020 AND 2022

insert into petrol values(15,'bharat',3000,200,10.2,60.3,'03/05/2020')

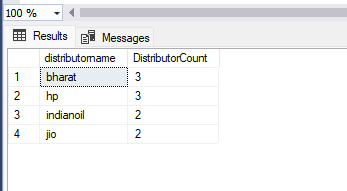
insert into petrol values(16,'hp',1000,900,10.2,10.3,'03/05/2021')

insert into petrol values(17,'indianoil',10000,9000,129.8,100.9,'03/05/2023')



--9

SELECT distributorname, COUNT(\*) AS DistributorCount FROM Petrol GROUP BY distributorname



**ASSIGNMENT\_8:**

****

--Assignment-8--

drop table if exists students

create table students(stid int,fname varchar(20),lname varchar(20),gpa float,enrolment\_date datetime,major varchar(20))

insert into students values(201,'shivansh','mahajan',8.79,'2021-09-01 09:30:00','computer science')

insert into students values(202,'umesh','sharma',8.44,'2021-09-01 08:30:00','mathematics')

insert into students values(203,'rakesh','kumar',5.60,'2021-09-01 10:00:00','biology')

insert into students values(204,'radha','sharma',9.20,'2021-09-01 12:45:00','chemistry')

insert into students values(205,'kush','kumar',7.85,'2021-09-01 08:30:00','physics')

insert into students values(206,'prem','chopra',9.56,'2021-09-01 09:24:00','history')

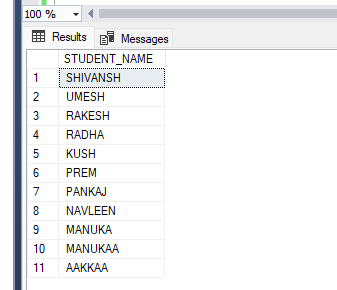
insert into students values(207,'pankaj','vats',9.78,'2021-09-01 02:30:00','english')

insert into students values(208,'navleen','kaur',7.00,'2021-09-01 06:30:00','mathematics')

select \* from students

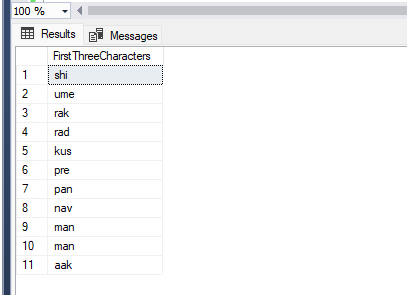
--1

select upper(fname) as STUDENT\_NAME from students



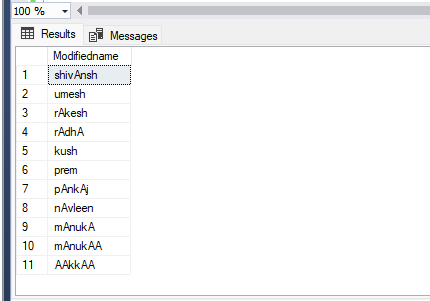
--2

SELECT LEFT (fname, 3) AS FirstThreeCharacters from students



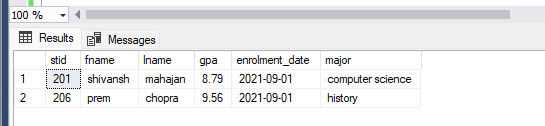
--3

select REPLACE(fname,'a','A') AS Modifiedname from students



--4

select \* from students where fname in ('prem','shivansh')

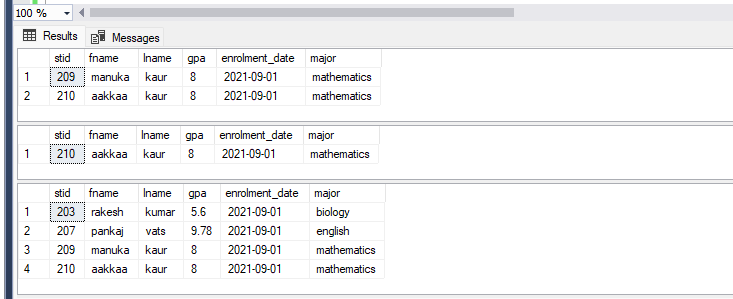


--5

select \* from students where fname like '%a' and len(fname)=6 --end with a

select \* from students where fname like 'a%' and len(fname)=6 ---start with a

select \* from students where fname like '%a%' and len(fname)=6 ---contains a

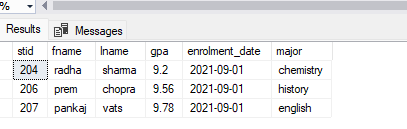


insert into students values(209,'manukaa','kaur',8.00,'2021-09-01 06:30:00','mathematics')

insert into students values(210,'aakkaa','kaur',8.00,'2021-09-01 06:30:00','mathematics')

--6

select \* from students where gpa between 9.00 and 9.99



--7

select count(\*) as COUNT\_OF\_COMPUTERSCIENCE from students where major='computer science'

