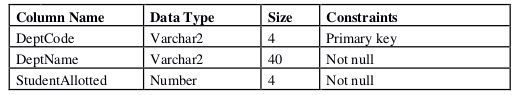
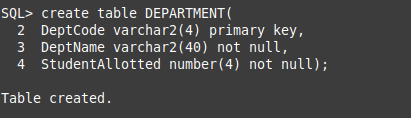
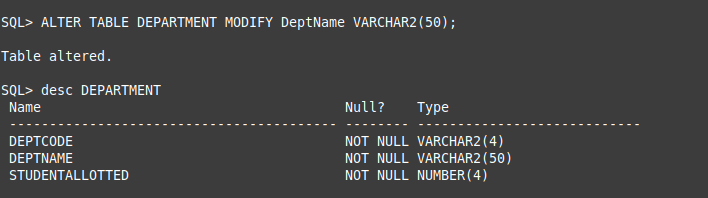
**Assignment :1**

1. Create the following table: DEPARTMENT

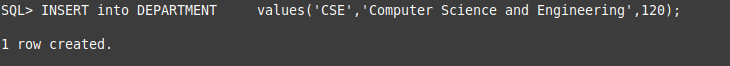


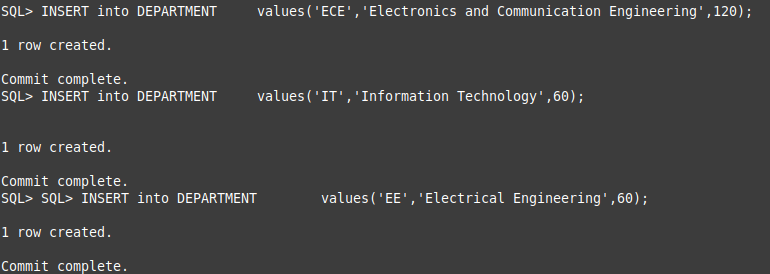


1. Display the structure of the table Department

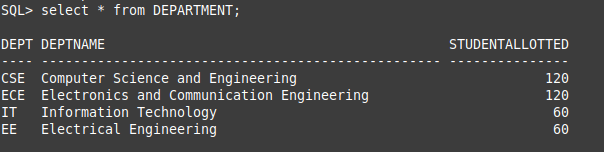


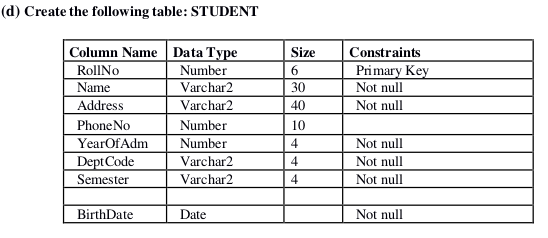
1. Insert data into the table.

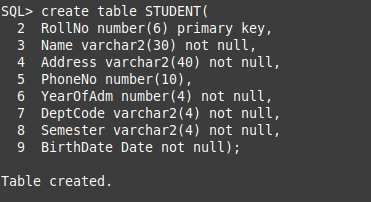




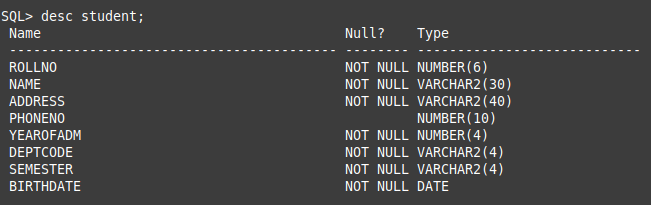
Showing all row of table:



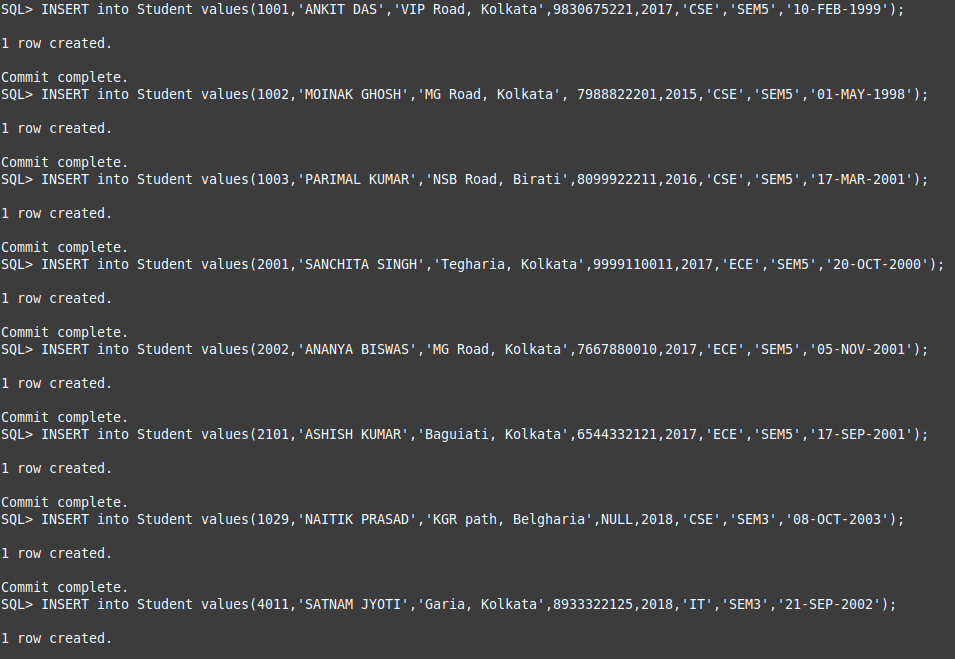


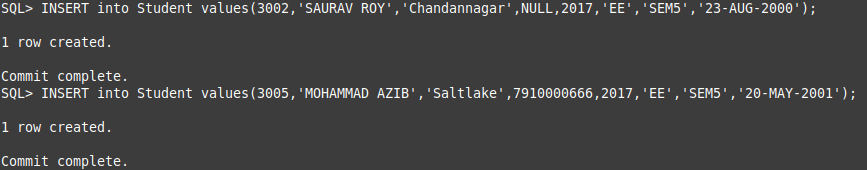


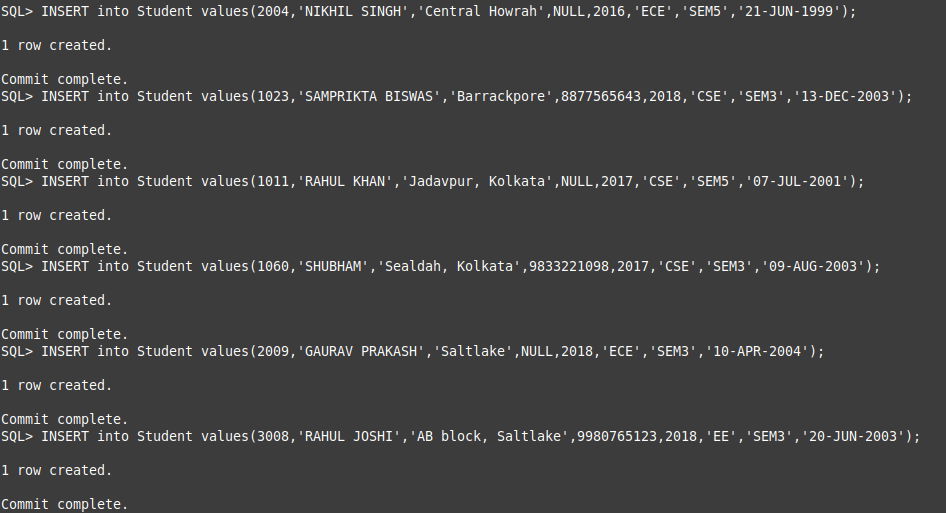
(e)Display the structure of the table Student.

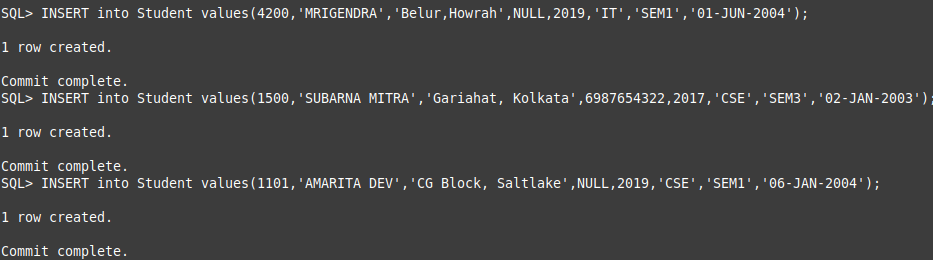


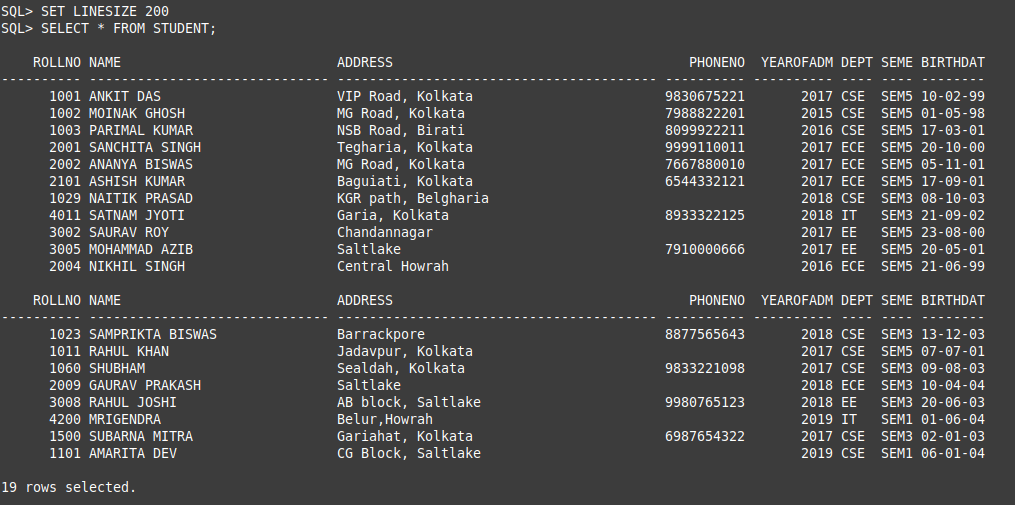
(f) Insert data into the table.





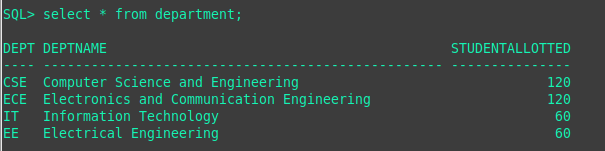




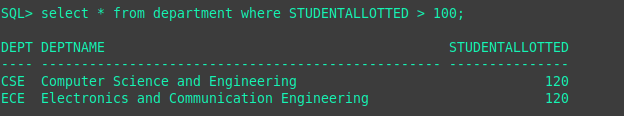


Assignment 2

·**Display the entire department information.**



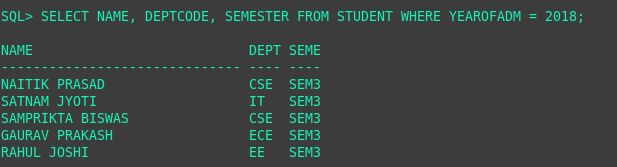
· **Display the department with allotted student number more than 100.**



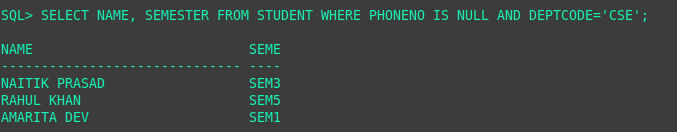
· **Display all students’ detail of CSE.**



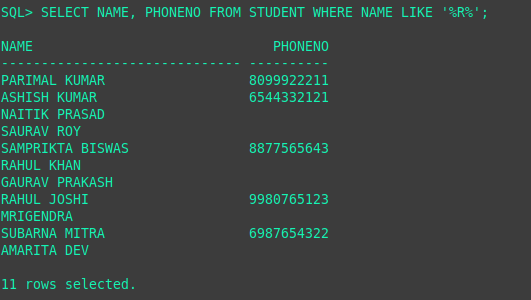
· **Display students name along with department code and semester who admitted in 2018.**



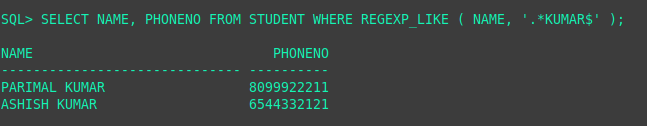
· **Show the name and semester of the CSE students who do not have phone numbers.**



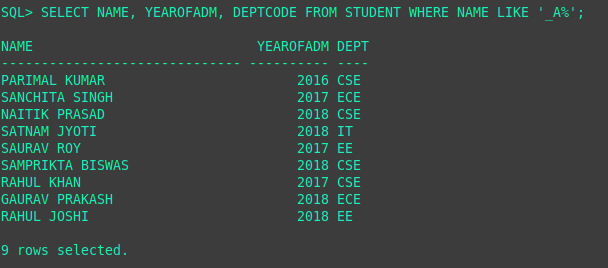
· **Show name and phone numbers students whose name starts with ‘R’.**



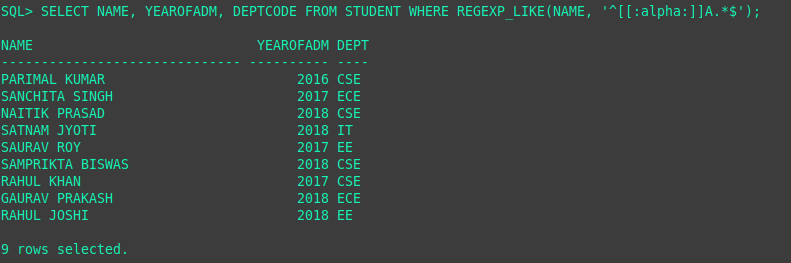
· **Show name and phone numbers of the students with Surname ‘Kumar’.**



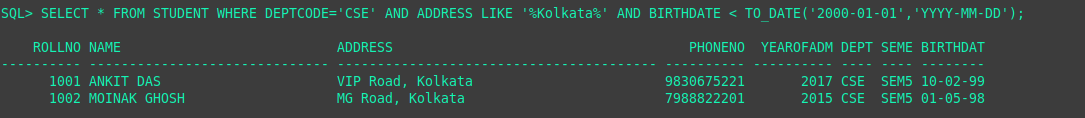
· **Show name, year of admission, deptcode of the student with second alphabet of name is ‘A’.**



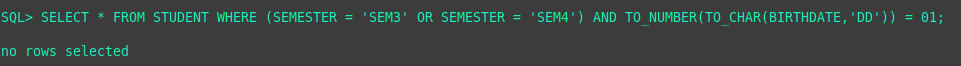
USING REGEXP\_LIKE():



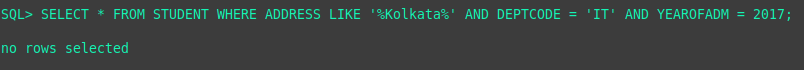
· **Show student details of CSE resident of KOLKATA, who born before 2000.**



· **Show student details of 2nd year who born in first day of a month.**



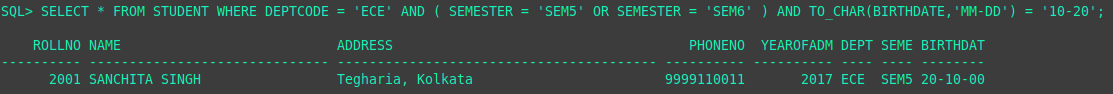
· **Display the students list of IT department who resides in ‘KOLKATA’ and admitted in 2017.**



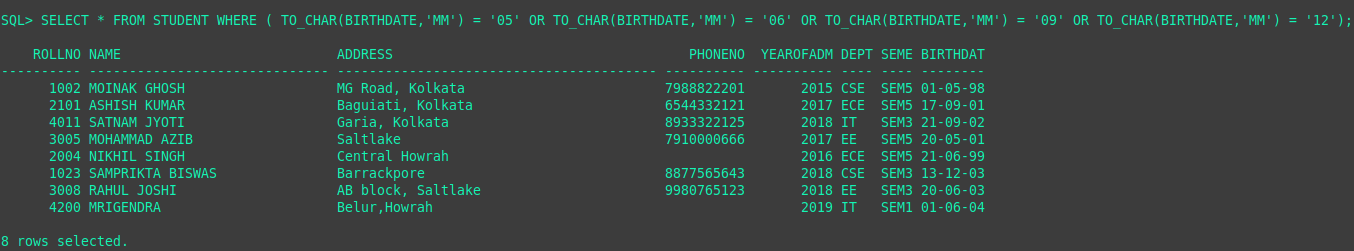
· **Show the phone no, year of admission and birth date of CSE students born in ‘JUNE’.**



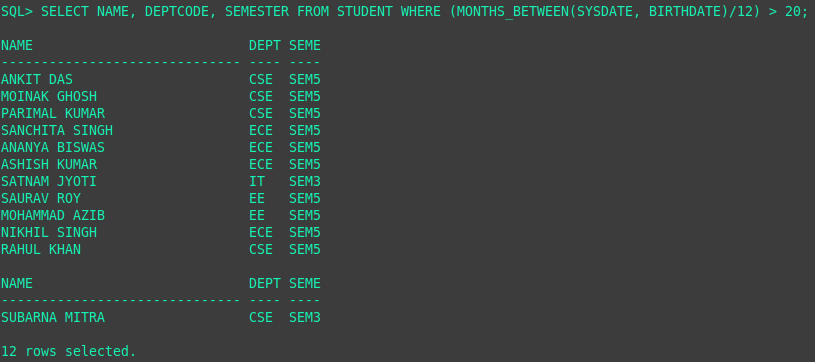
· **Display the list of ECE 3rd year students whose birthday is 20 th October.**



· **Show student details who born in either May, June, September or December.**

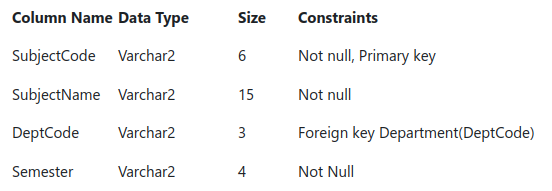


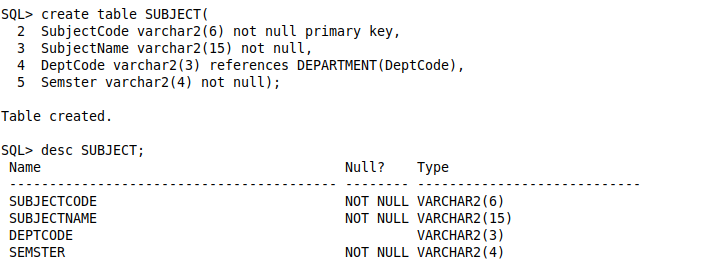
· **Display the students name, department, semester whose age is more than 20 year.**



**Assignment 3**

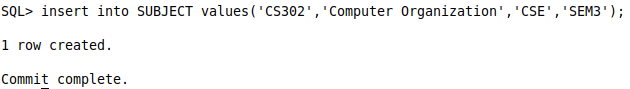
(a)    Create table **SUBJECT** and insert appropriate values.

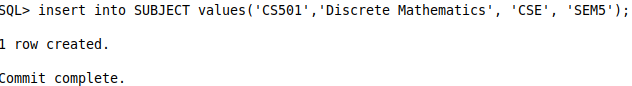


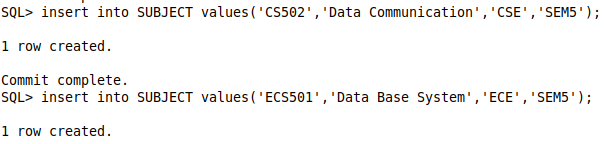






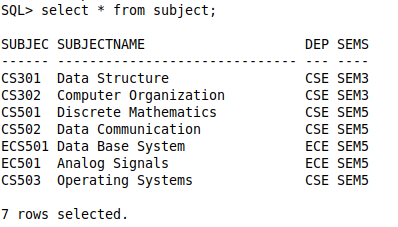




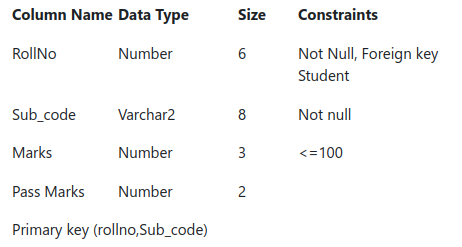


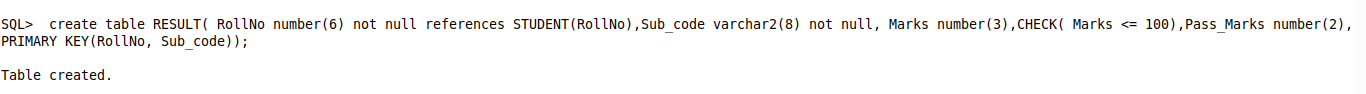


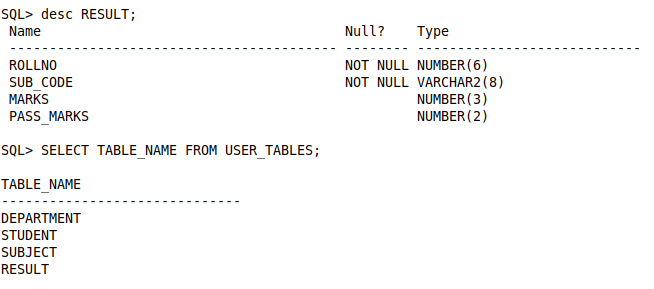


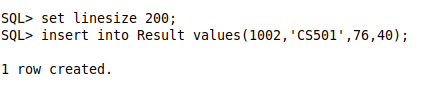


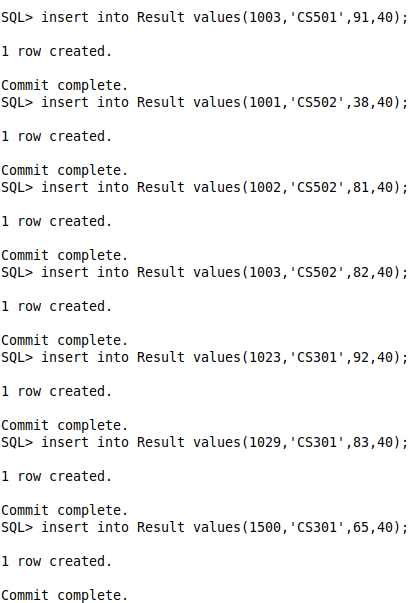
**(b)** Create table: **RESULT**

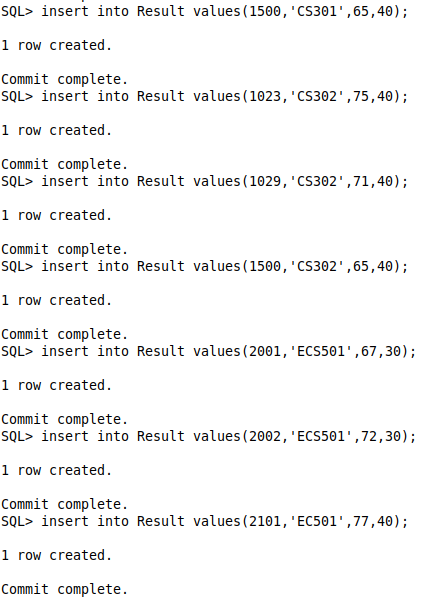


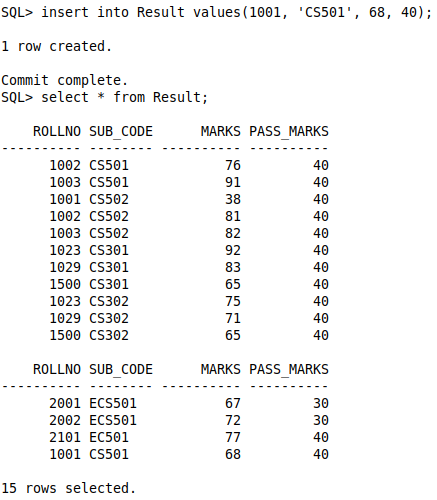








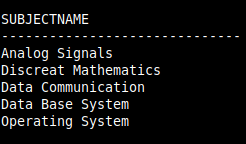




**Assignment 4**

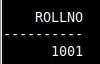
1. Find the names of subjects for students of CSE 5th semester.

select subjectname from subject where semester='SEM5';



1. Find the roll numbers who got marks between 61 to 70 in CS501.

select rollno from result where marks >= 61 and marks <= 70 and sub\_code = 'CS501';



1. Change the address of the student whose roll number is given.

update student set ADDRESS = 'Jessore road kolkata' where rollno = 1001;



1. Increase the total number of student allocation of IT to 75.

update department set studentalloted =75 where deptcode = 'IT';



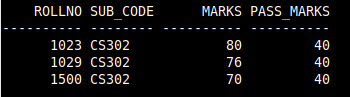
1. Increase the total number of student allocation of CSE by 15.

update department set studentalloted = studentalloted + 15 where deptcode = 'CSE';



1. Increase the marks of all students of subject CS302 by 5.

update result set marks = marks + 5 where sub\_code = 'CS302';



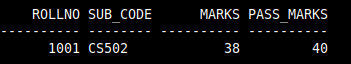
1. Add a default phone number to all CSE 5th semester students who do not have phone number.

update student set phoneno = 1112223334 where semester = 'SEM5' and phoneno is null and deptcode = 'CSE';



1. Display the rows from RESULT where a student failed to obtain pass marks.

select \* from result where marks < pass\_marks;



1. Add 2 marks to the students who failed for maximum 2 marks to any the subjects with CS code.

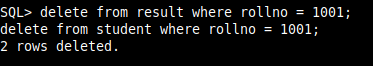
update result set marks = marks+2 where (pass\_marks - marks)>0 and (pass\_marks - marks) <= 2 and sub\_code like 'CS%';



1. Delete the student with given roll number from student table.

delete from result where rollno = 1001;

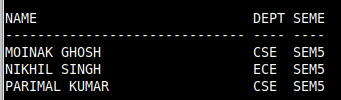
delete from student where rollno = 1001;





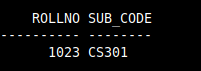
1. Display the students name, deptcode, semester who admitted before 2017 in alphabetical order of name.

select name,deptcode,semester from student where yearofadm<2017 order by name;



1. Display the roll number, subject code  who got more than 90 in either CS301 or CS302.

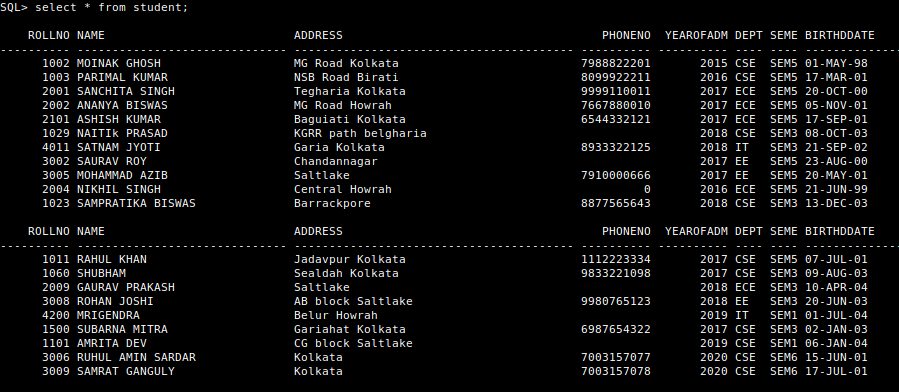
select rollno, sub\_code from result where marks>90 and (sub\_code='CS301' or sub\_code='CS302');



1. Insert two students in students table.

insert into student values(3006, 'RUHUL AMIN SARDAR','Kolkata', 7003157077,2020, 'CSE', 'SEM6', '15-JUN-2001');

insert into student values(3009, 'SAMRAT GANGULY','Kolkata', 7003157078,2020, 'CSE', 'SEM6', '17-JUL-2001');



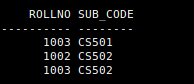
1. Delete phone number of a given student.

update student set phoneno = null where rollno=1011;



1. Display the roll number, subject code  who got more than 40 from pass marks in either CS501 or CS502.

SELECT ROLLNO , SUB\_CODE FROM RESULT WHERE ((MARKS - PASS\_MARKS>=40) AND (SUB\_CODE LIKE 'CS501' OR SUB\_CODE LIKE 'CS502'));

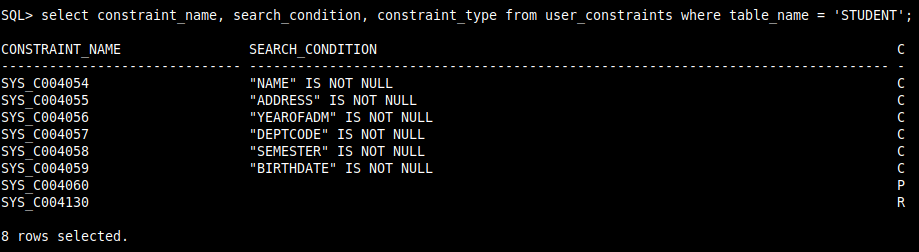


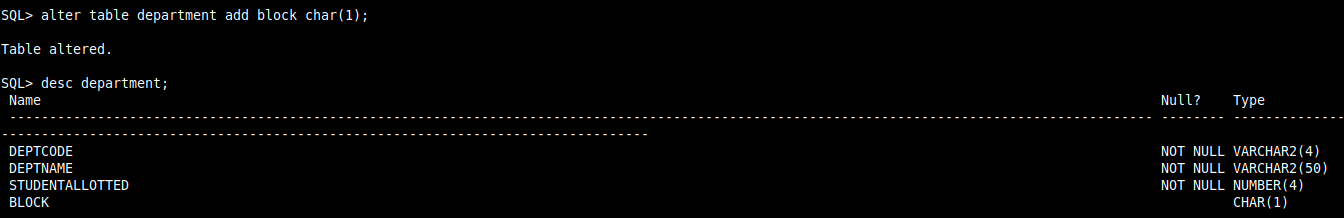
**Assignment 5**

**Topic 3 : Use of DDL - Add columns, constraints after table creation**

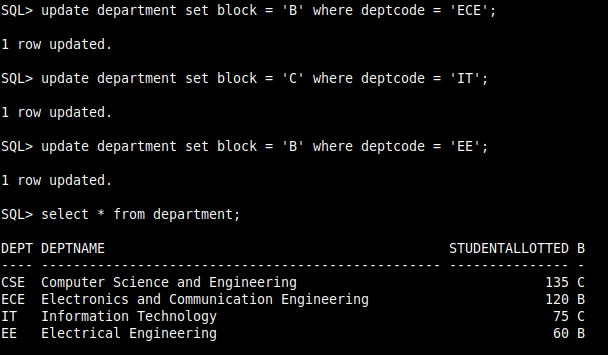
1. Add constraint : DeptCode of Student  is foreign key with reference to DeptCode in Department.

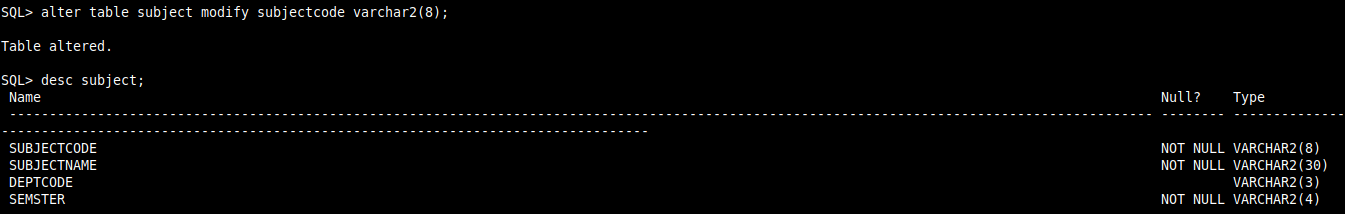


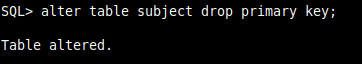
  
(ii) Add an attribute ***Block***to the department table (data type - Char).

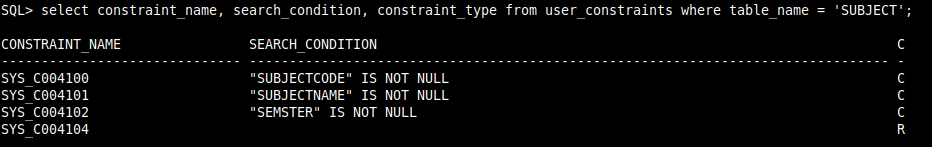
  
(iii) Insert data to this attribute.

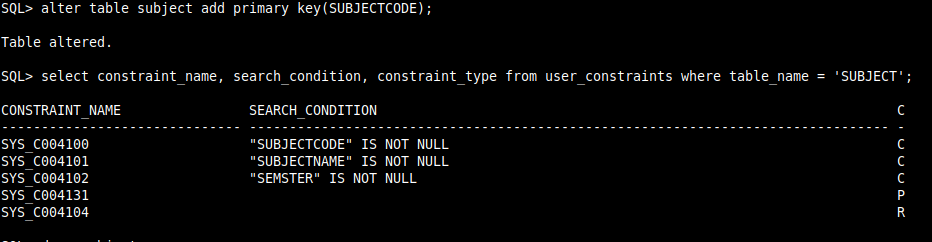


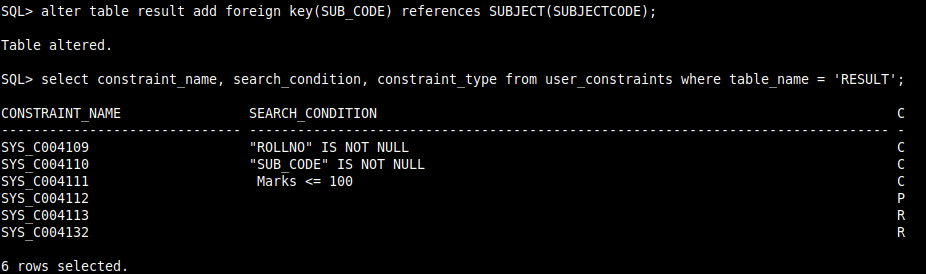
  
(iv) Increase the width of the column subject code of SUBJECT table to 8.

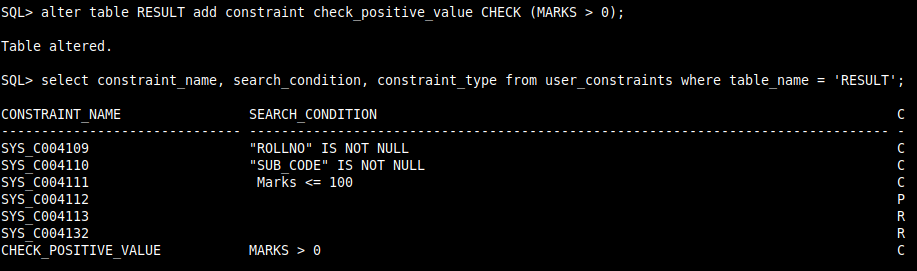
  
(v) Delete primary key of table of Subject.

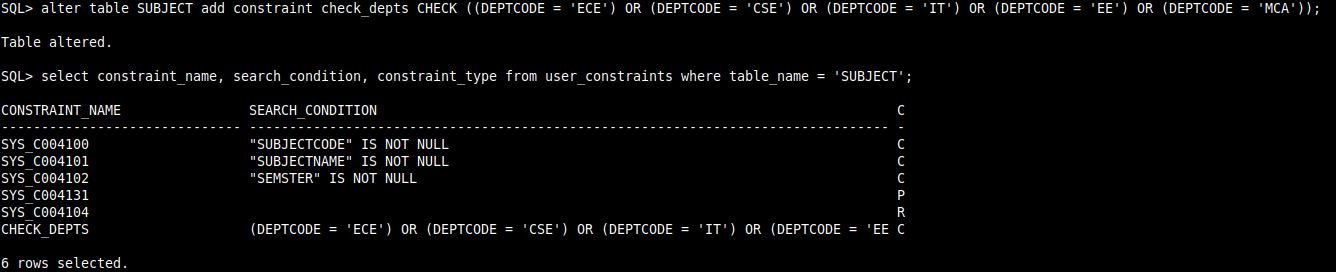


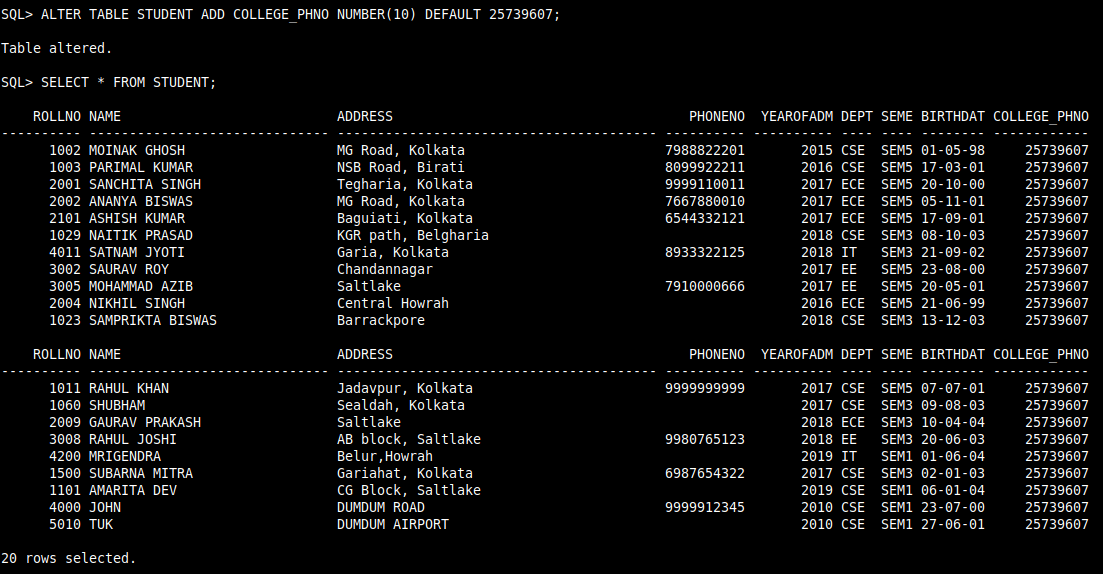
  
(vi) Add primary key to the table subject.

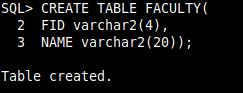
  
(vii) Make Sub\_code of Result table foreign key with respect to Subject code of SUBJECT table.

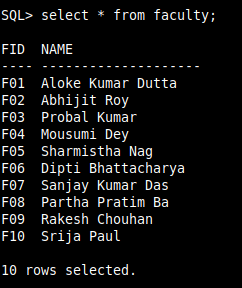
  
(viii) Add constraint that marks cannot be negative.

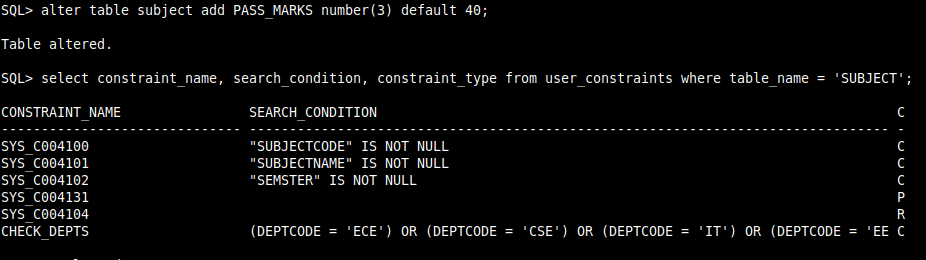
  
(ix) Alter the table SUBJECT and add check constraint such DeptCode is either CSE,IT, MCA, EE, ECE

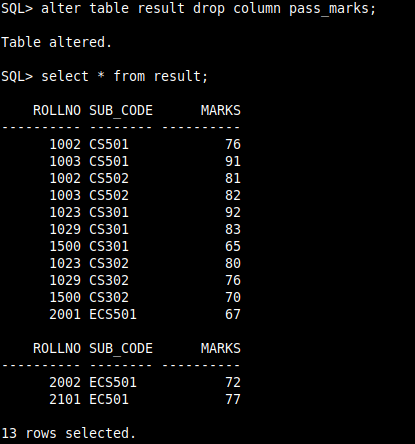
  
(x) Add column college phone number and add phone number 25739607 to each student.

  
(xi) Create a table FACULTY (FID VARCHAR2(4), Name VARCHAR2(20)); Faculty id should start with ‘F’.

  
(xii) Insert values to the table Faculty.

  
(xiii) Insert column pass marks in subject table and add values to this column.

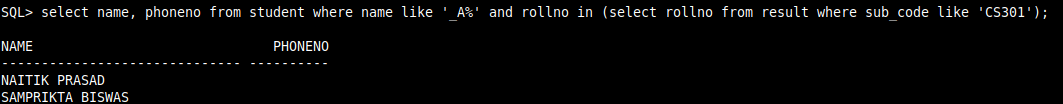
  
(xiv) Delete the column pass marks from Result.



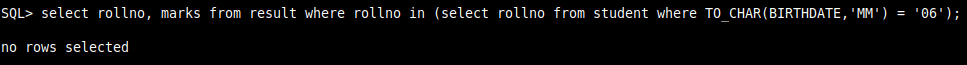
**Assignment 6**

**NESTED IN**

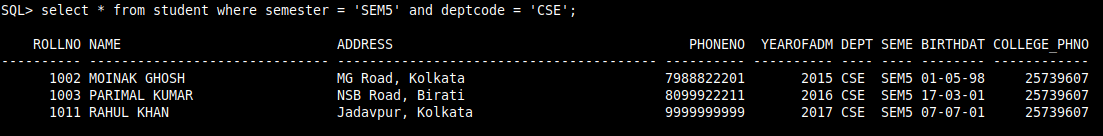
i. Display name, phone number of students with ‘a’ as the second letter in their names who read subject CS301.



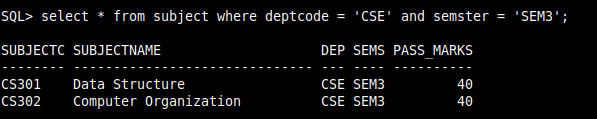
ii. Display the marks for all available subjects for the students who born in JUNE.



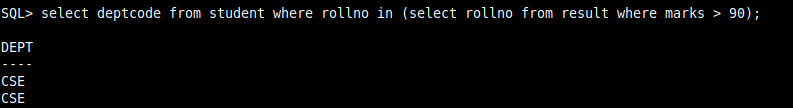
iii. Show the student details of 5th semester Computer science and engineering Department.



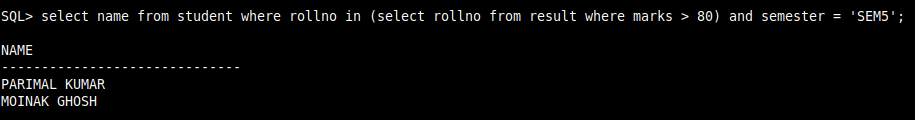
iv. Show the subject details of 3rd semester Computer science and engineering Department.



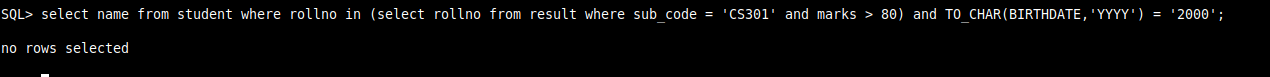
v. Display the department name for which some student get more than 90.



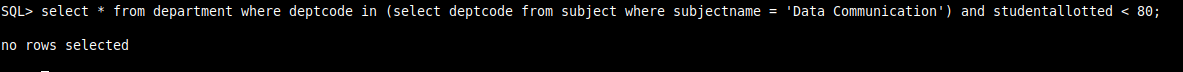
vi. Display the student name who reads in 5th semester and get more than 80 in any subject.



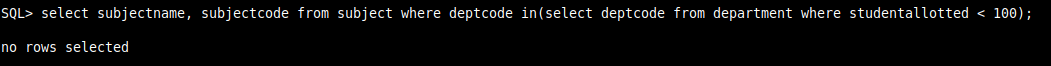
vii. Display the name of CSE student who born in 2000 and get more than 80 in CS301.



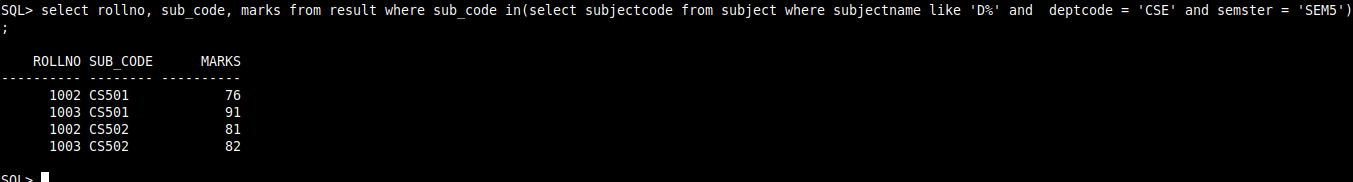
viii. Display the department details with less than 80 students which has subject name Data Communication.



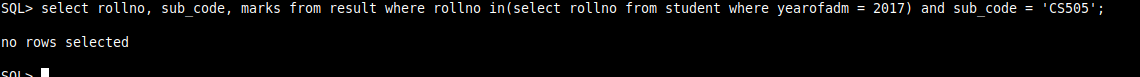
ix. Display subject name, subject code of the department with allotted student less than 100.



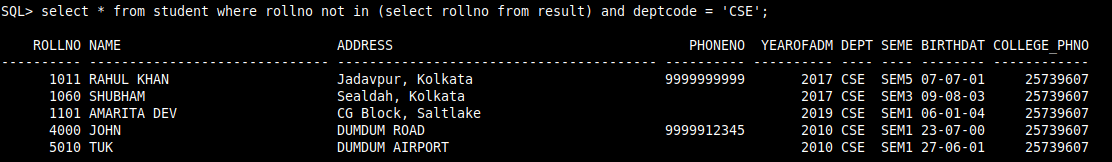
x. Show Roll number, subject code and marks for CSE 3rd year students where subject name starts with D



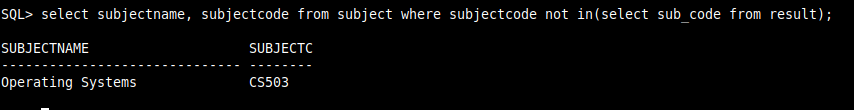
xi. Display roll number, subject and marks of students who took admission in the year 2017 and read subject CS505.



xii. Find the student details of CSE students whose marks are not available in result.



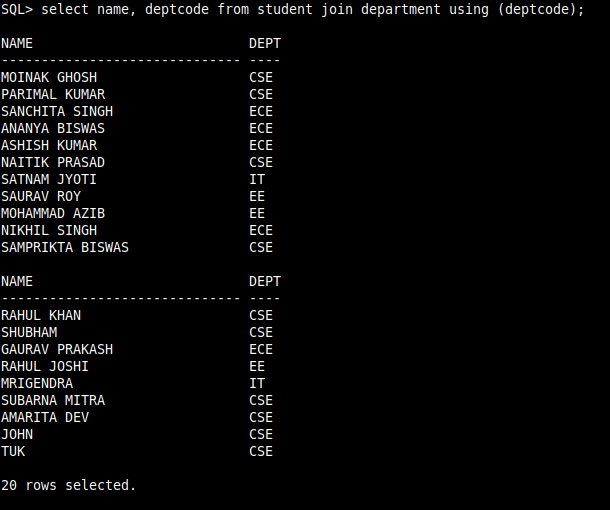
xiii. Find the subject name, subject code which is not included in result.



**ASSIGNMENT 7**

JOIN OPERATIONS, CARTESIAN PRODUCT, NATURAL JOIN, OUTER JOIN

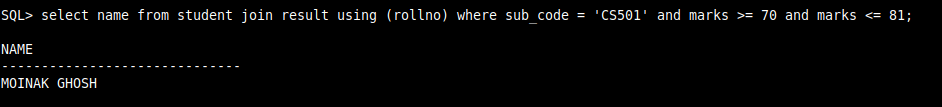
i. Display student names along with the department name.



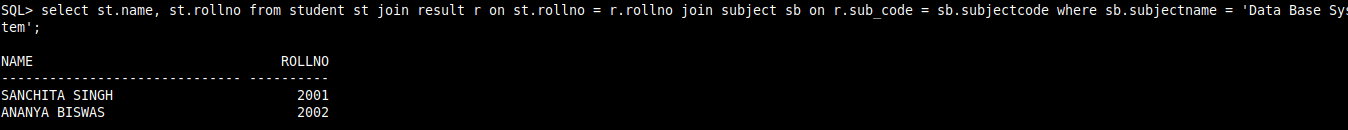
ii. Display student names, subject code and marks of students who took admission in the year 2017 and read subject CS502.



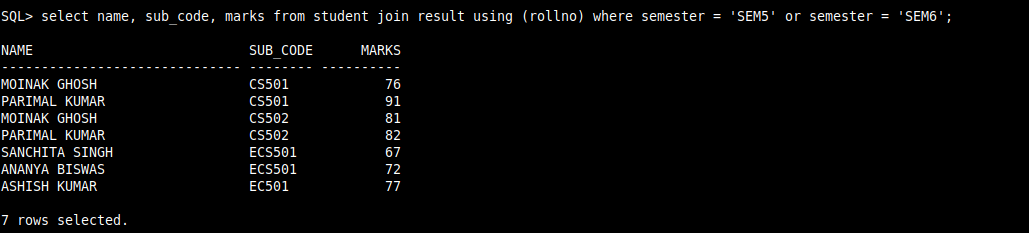
iii. Find the name of the students who got marks between 70 to 89 in CS501.



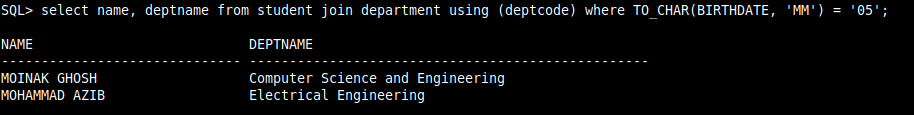
iv. Find the student name, roll no who appeared in the examination for paper DBMS.



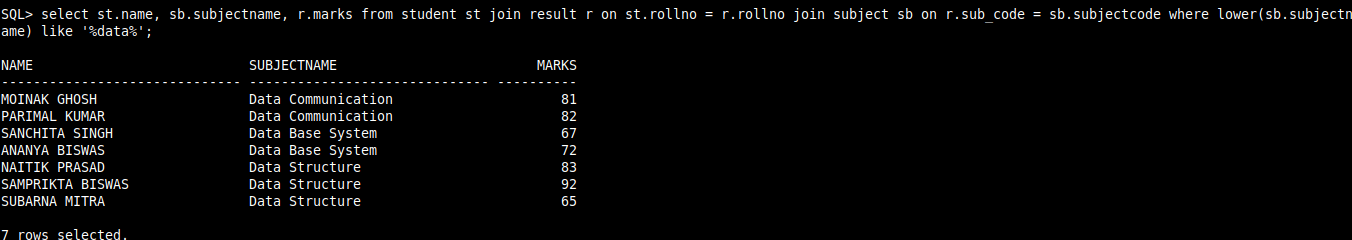
v. Show student names, subject code and marks for CSE 3rd year students.



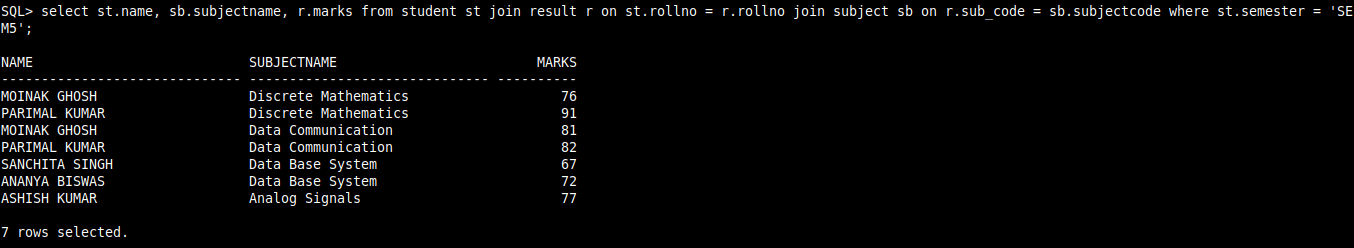
vi. Show student names, department name for 5 th semester students who born in MAY.

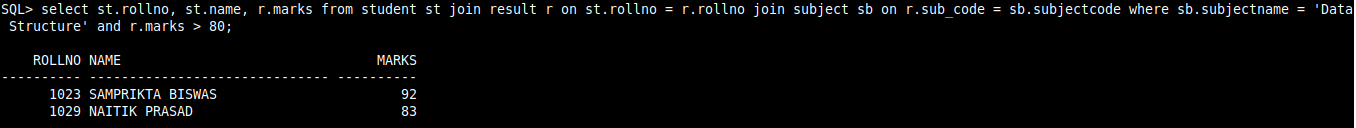


vii. Show student names, subject name for 5th semester student where subject name contains the word ‘DATA’

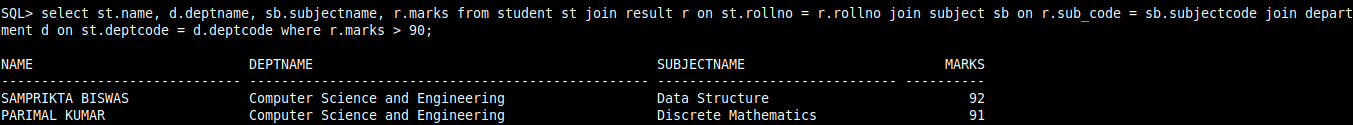


viii. Show student names, subject name and marks for 5th semester students.

ix. Find the roll number, student names and marks for CSE students who get more than 80 in Data Structure.

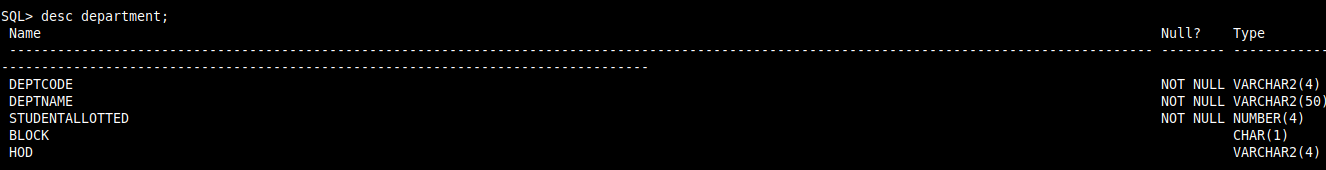


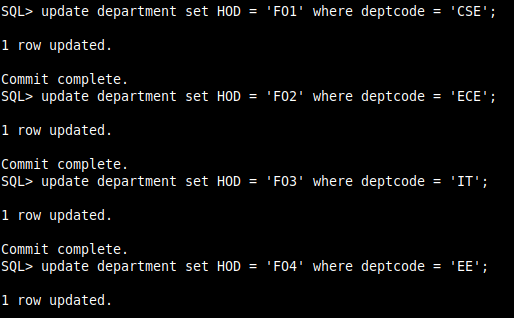
x. Show student names, department name, subject name and subject wise marks for which the student get more than 90.



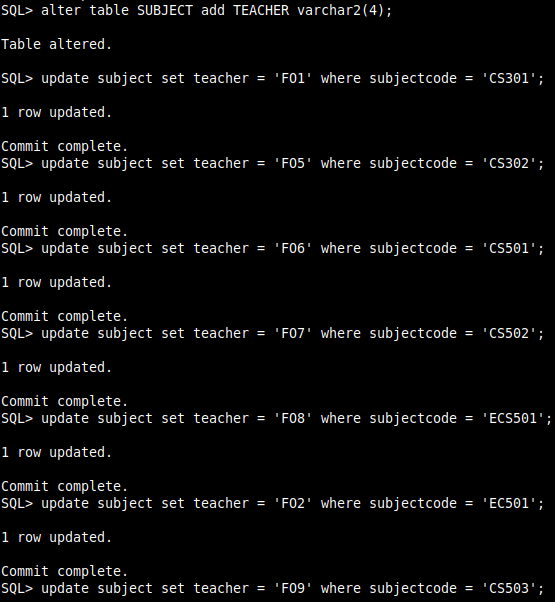
xi. Add column HOD in DEPARTMENT. Insert faculty id in place of HoD.





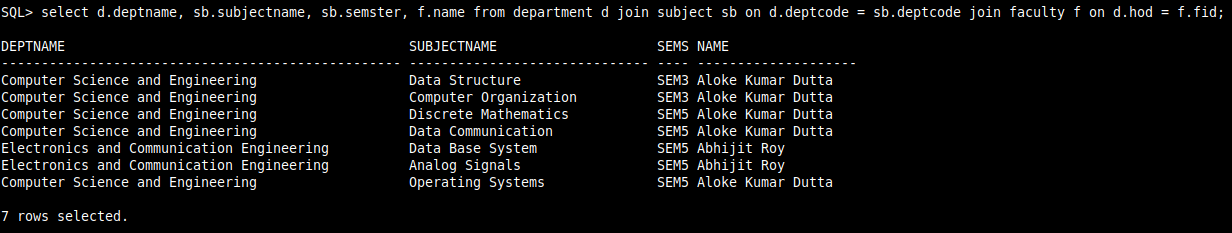


xii. Add column TEACHER in table SUBJECT. Insert faculty id in this column.

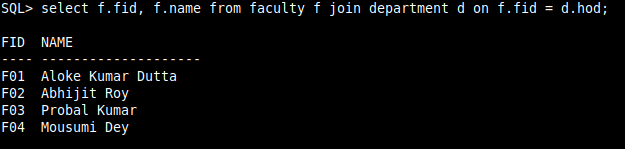




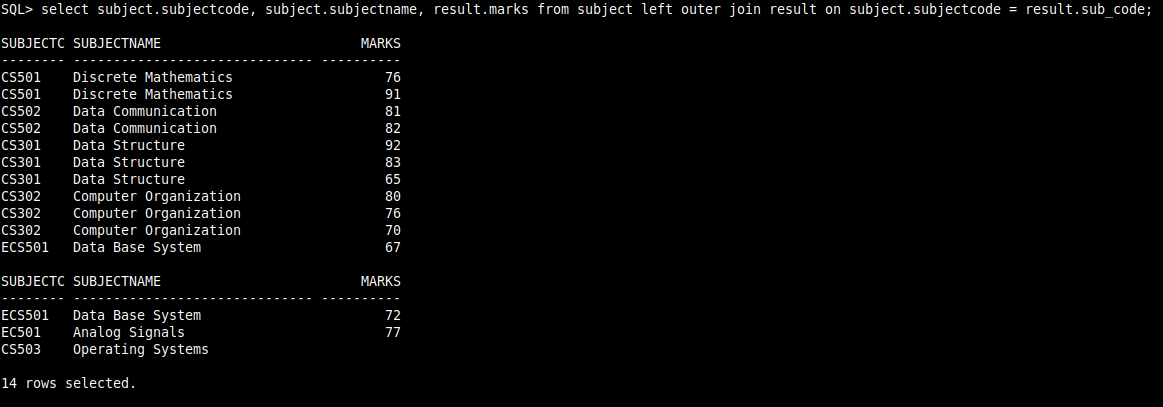
xiii. Show the department name, semester, subject name along with faculty name.



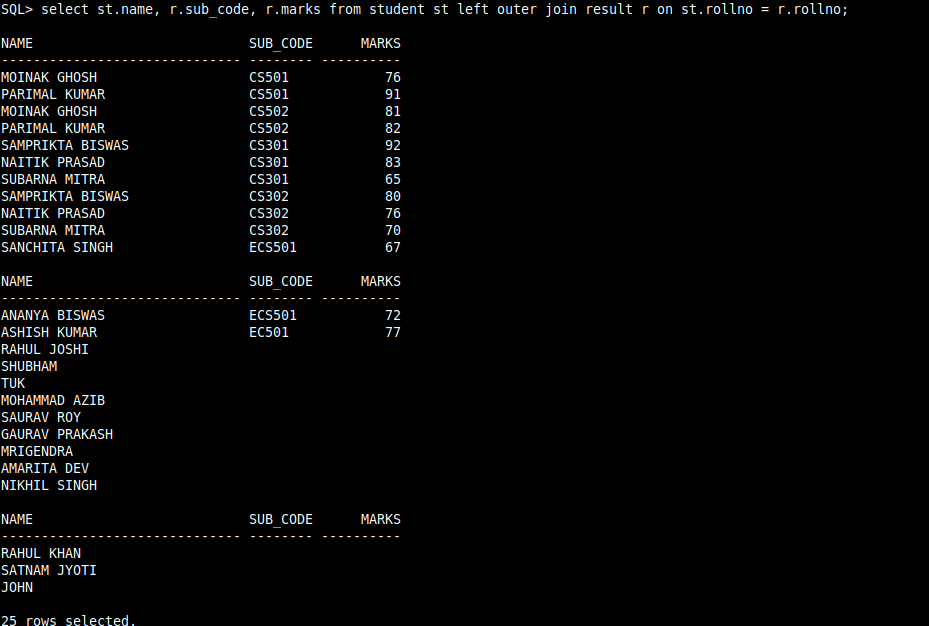
xiv. Find the names of all faculties whose HOD name is given.



xv. Display subject name, subject code, marks including all subjects.[Outer join]



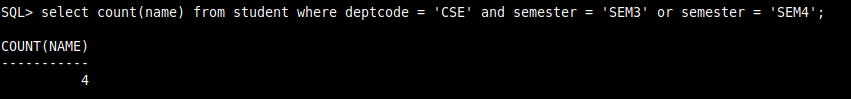
xvi. Display students name, subject code, marks. Include all students.[Outer join]



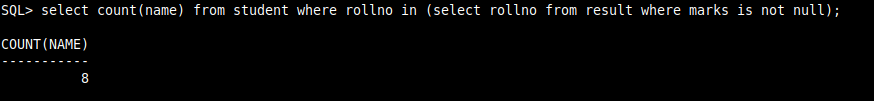
**ASSIGNMENT 8**

**QUERIES USING AGGREGATE FUNCTIONS**

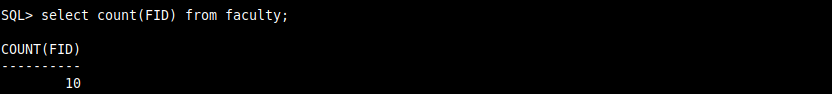
i. Find the number of student in CSE second year.



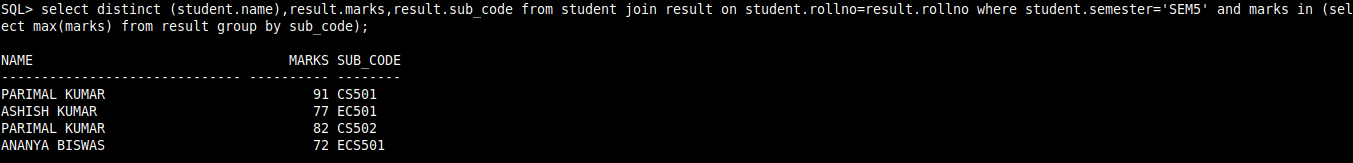
ii. Find the number of students whose marks of any subject is available.



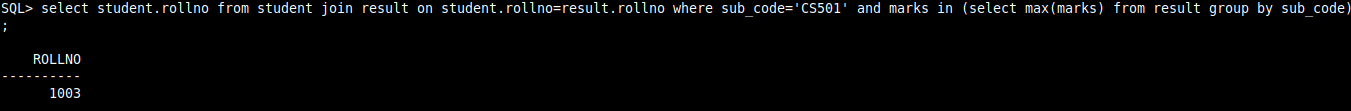
iii. Find total number of faculty.



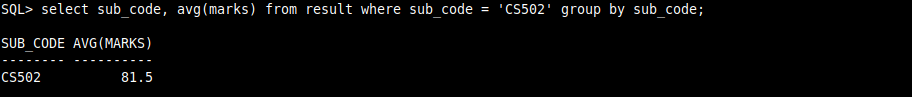
iv. Find the 5th semester student(s) who got maximum marks in a subject.



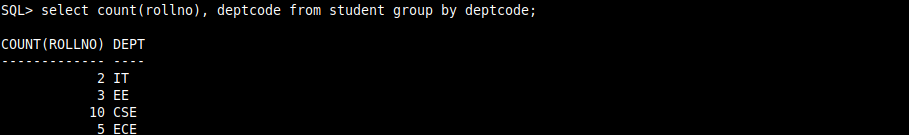
v. Find the roll number  of a student who got maximum marks in CS501.



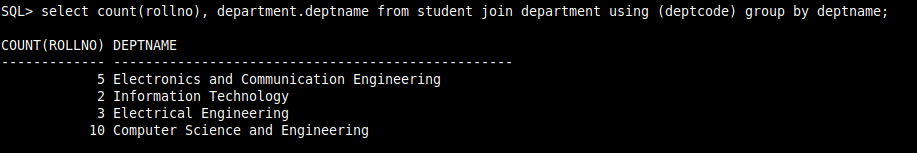
vi. Display average marks of CS502.



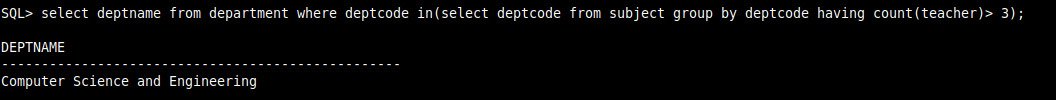
vii. Find the number of students in each department with their department code.



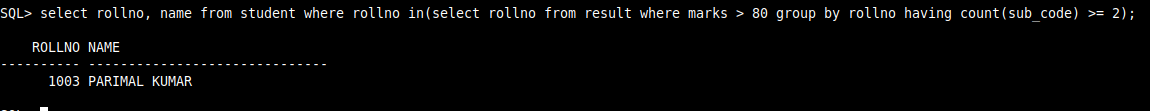
viii. Find the number of students in each department with their department name.



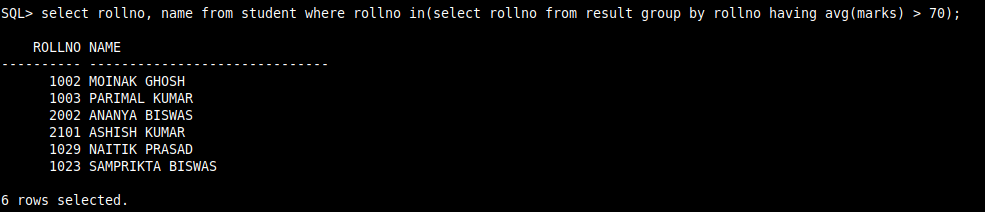
ix.  Find the Department with more than three faculty.



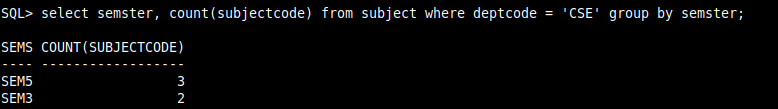
x.  Find the student name and roll no who get more than 80 in at least two subject.



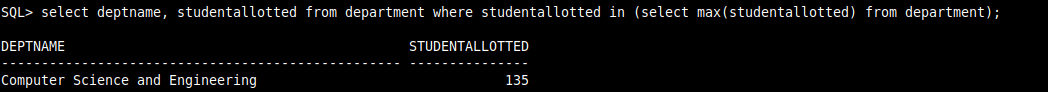
xi. Find the student name and roll no who get more than 70 in average.



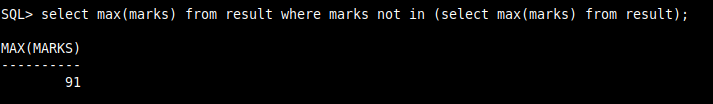
xii. Display number of subject semester wise in dept CSE.



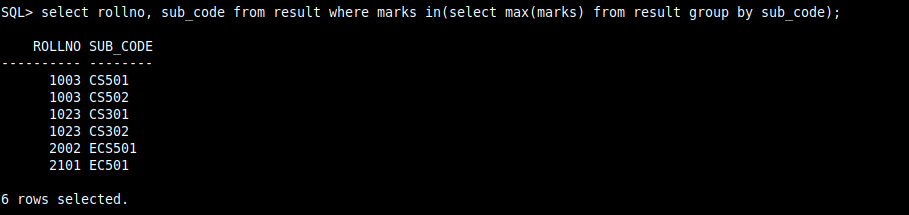
xiii. Find the department name with maximum number of student.



xiv. Find the second highest marks of the result table.



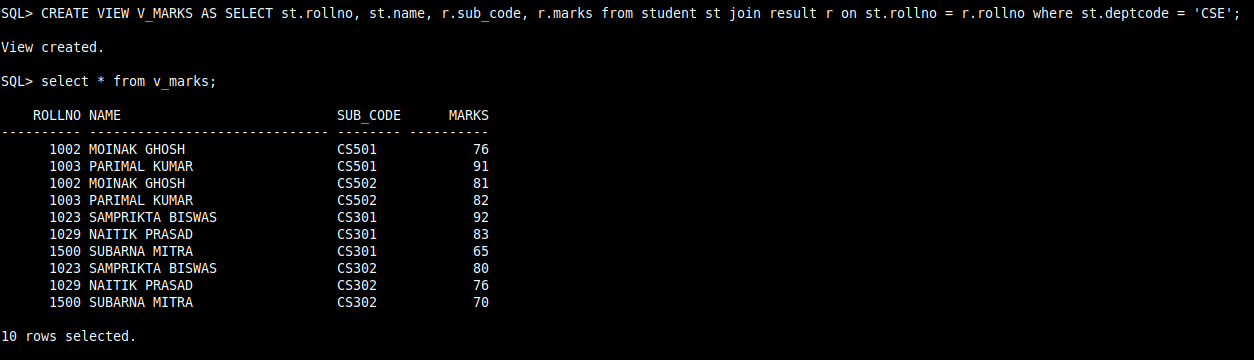
xv. Find the students name who got highest marks, subjectwise.



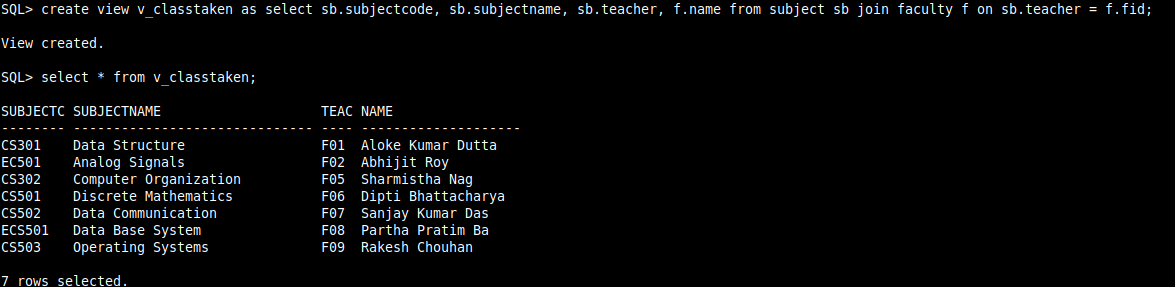
**Assignment 9**

**Creation, Manipulation and Dropping of views**

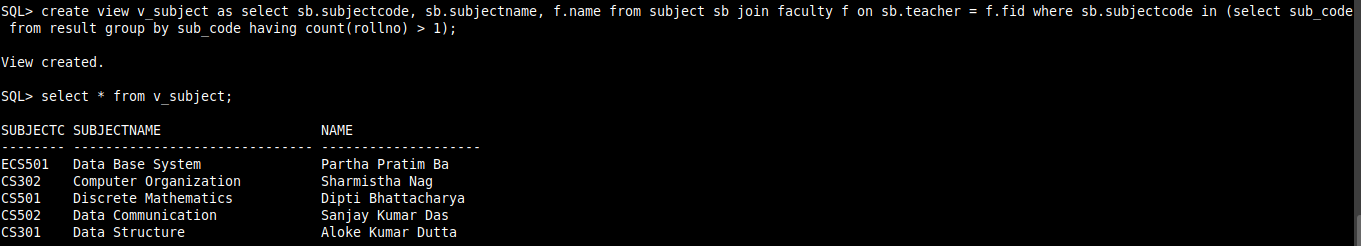
1. Create view V\_MARKS with roll no, student name, subject code, marks of all CSE students.



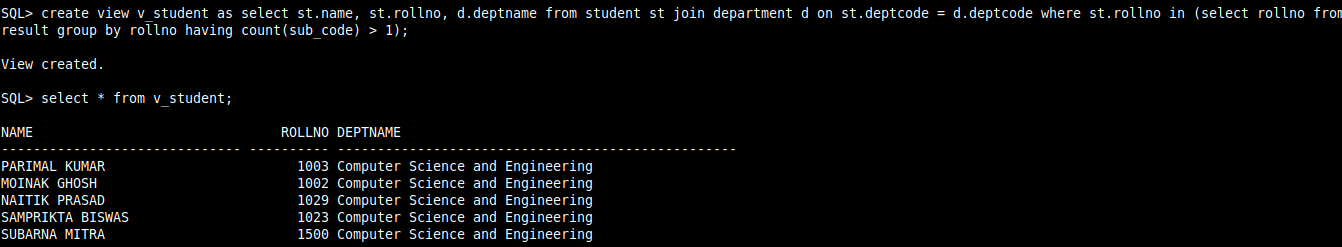
1. Create view V\_CLASSTAKEN with subject code, subject name, Faculty code, faculty name where the subject is taught by that faculty.



1. Create view V\_SUBJECT with subject\_code, subject\_name, teacher name where number of student in the subject is more than 1.



1. Create view V\_STUDENT with student name, roll number, department who appeared in at least one examination.



1. Create view V\_DEPT with dept code, semester, number of student with more than 75 marks in at least one subject.



