* **COMMIT is used to save all the data we are working on, permenantly in the database. SET AUTOCOMMIT ON is used because it regularly save the work, so we don’t have to worry about saving it all the time.**

set autocommit on

Commit complete.

* **ALTER TABLE <table-name> is used to update definition or structure of the given table. It is also used to add or drop certain columns in/from table.**

alter table student

add (HSC number(6,2))

Name Null? Type

----------------------------------------------------- -------- ------------------------------------

ROLLNO VARCHAR2(8)

NAME VARCHAR2(30)

DOB DATE

HSC\_MARKS VARCHAR2(5)

MEMBERS VARCHAR2(30)

JEE\_SCORE VARCHAR2(3)

HSC NUMBER(6,2)

* **Here, DROP COLUMN keywords are used to delete an entire column from the table student.**

ALTER TABLE STUDENT

DROP COLUMN HSC\_MARKS

Table altered.

SQL> DESC STUDENT

Name Null? Type

----------------------------------------------------- -------- ------------------------------------

ROLLNO VARCHAR2(8)

NAME VARCHAR2(30)

DOB DATE

MEMBERS VARCHAR2(30)

JEE\_SCORE VARCHAR2(3)

HSC NUMBER(6,2)

* **FINAL TABLE**

SQL> select \* from student;

ROLLNO NAME DOB MEMBERS JEE HSC

-------- ------------------------------ --------- ------------------------------ --- ---------

17BCE001 AAryan Gupta 01-JAN-00 ISTE 154 90.33

17BCE004 Anjali Gama 04-FEB-99 RCNI,ISTE 180 89.78

17BCE010 Bharat Adharyu 02-JUN-99 ISTE 130 87.56

17BCE011 Bhavya Shah 11-SEP-99 AUGEN 145 89.23

17BCE009 Mayank Barnwal 23-JUN-99 145 87.33

17BCE065 Aum Naik 21-AUG-00 130 96.67

17BCE007 Ridham Avaiya 25-MAR-99 AUGEN 140 85.67

17BCE014 Khodidas Chauhan 21-JUL-00 AUGEN,ISTE 143 84.33

17BCE017 Manad Desai 24-DEC-00 ISTE,RCNI 123 87.44

17BCE007 Vinit Desai 23-MAR-99 86 87.67

17BCE023 Sanket Patel 20-MAR-99 ISTE 90 90.33

17BCE090 Chitrang Patel 13-MAY-99 74 78.88

17BCE016 Levin Dhabi 03-JAN-99 150 81.33

17BCE034 Samarth Solanki 23-FEB-99 122 95.33

17BCE087 Gaurav Ladhha 02-SEP-00 143 87.55

17BCE054 Harsh Naik 23-APR-00 RCNI 110 87.33

17BCE056 Kunal Chhatwani 27-MAR-99 160 97.22

17BCE018 Vraj Desai 02-JUN-00 119 94.33

17BCE019 Dev Gagrani 13-JAN-00 160 90.13

17BCE020 Dev Joshi 03-AUG-99 RCNI 180 94.33

20 rows selected.

* **WHERE is used to fetch any particular record which satisfies the condition written after WHERE.**
* **This is list of student who have not joined any of the group.**

select \* from student

where members is null;

ROLLNO NAME DOB MEMBERS JEE HSC

-------- ------------------------------ --------- ------------------------------ --- ---------

17BCE009 Mayank Barnwal 23-JUN-99 145 87.33

17BCE065 Aum Naik 21-AUG-00 130 96.67

17BCE007 Vinit Desai 23-MAR-99 86 87.67

17BCE090 Chitrang Patel 13-MAY-99 74 78.88

17BCE016 Levin Dhabi 03-JAN-99 150 81.33

17BCE034 Samarth Solanki 23-FEB-99 122 95.33

17BCE087 Gaurav Ladhha 02-SEP-00 143 87.55

17BCE056 Kunal Chhatwani 27-MAR-99 160 97.22

17BCE018 Vraj Desai 02-JUN-00 119 94.33

17BCE019 Dev Gagrani 13-JAN-00 160 90.13

10 rows selected.

* **This query displays all the information about student having JEE score greater than 120.**

select \* from student

where(jee\_score>120);

ROLLNO NAME DOB MEMBERS JEE HSC

-------- ------------------------------ --------- ------------------------------ --- ---------

17BCE001 AAryan Gupta 01-JAN-00 ISTE 154 90.33

17BCE004 Anjali Gama 04-FEB-99 RCNI,ISTE 180 89.78

17BCE010 Bharat Adharyu 02-JUN-99 ISTE 130 87.56

17BCE011 Bhavya Shah 11-SEP-99 AUGEN 145 89.23

17BCE009 Mayank Barnwal 23-JUN-99 145 87.33

17BCE065 Aum Naik 21-AUG-00 130 96.67

17BCE007 Ridham Avaiya 25-MAR-99 AUGEN 140 85.67

17BCE014 Khodidas Chauhan 21-JUL-00 AUGEN,ISTE 143 84.33

17BCE017 Manad Desai 24-DEC-00 ISTE,RCNI 123 87.44

17BCE016 Levin Dhabi 03-JAN-99 150 81.33

17BCE034 Samarth Solanki 23-FEB-99 122 95.33

17BCE087 Gaurav Ladhha 02-SEP-00 143 87.55

17BCE056 Kunal Chhatwani 27-MAR-99 160 97.22

17BCE019 Dev Gagrani 13-JAN-00 160 90.13

17BCE020 Dev Joshi 03-AUG-99 RCNI 180 94.33

15 rows selected.

* **LIKE keyword is used to find any pattern or substring from given string. Here, ‘%’ describes any char value, it means that ‘A%’ means a string should always starts with one and then can have any numbers of letter in any order.**

select \* from student

where name like 'A%';

ROLLNO NAME DOB MEMBERS JEE HSC

-------- ------------------------------ --------- ------------------------------ --- ---------

17BCE001 Aaryan Gupta 01-JAN-00 ISTE 154 90.33

17BCE004 Anjali Gama 04-FEB-99 RCNI,ISTE 180 89.78

17BCE065 Aum Naik 21-AUG-00 130 96.67

* **DROP keyword is used here with ALTER TABLE to delete an entire column named HSC from table student.**

alter table student

drop column HSC

Table altered.

select \* from student;

ROLLNO NAME DOB MEMBERS JEE HSC\_MARKS

-------- ------------------------------ --------- ------------------------------ --- ---------

17BCE001 Aaryan Gupta 01-JAN-00 ISTE 154 90.33

17BCE004 Anjali Gama 04-FEB-99 RCNI,ISTE 180 89.78

17BCE010 Bharat Adharyu 02-JUN-99 ISTE 130 87.56

17BCE011 Bhavya Shah 11-SEP-99 AUGEN 145 89.23

17BCE009 Mayank Barnwal 23-JUN-99 145 87.33

17BCE065 Aum Naik 21-AUG-00 130 96.67

17BCE007 Ridham Avaiya 25-MAR-99 AUGEN 140 85.67

17BCE014 Khodidas Chauhan 21-JUL-00 AUGEN,ISTE 143 84.33

17BCE017 Manad Desai 24-DEC-00 ISTE,RCNI 123 87.44

17BCE007 Vinit Desai 23-MAR-99 86 87.67

17BCE023 Sanket Patel 20-MAR-99 ISTE 90 90.33

17BCE090 Chitrang Patel 13-MAY-99 74 78.88

17BCE016 Levin Dhabi 03-JAN-99 150 81.33

17BCE034 Samarth Solanki 23-FEB-99 122 95.33

17BCE087 Gaurav Ladhha 02-SEP-00 143 87.55

17BCE054 Harsh Naik 23-APR-00 RCNI 110 87.33

17BCE056 Kunal Chhatwani 27-MAR-99 160 97.22

17BCE018 Vraj Desai 02-JUN-00 119 94.33

17BCE019 Dev Gagrani 13-JAN-00 160 90.13

17BCE020 Dev Joshi 03-AUG-99 RCNI 180 94.33

20 rows selected.

* **In this query, we tried to insert a number in data for which datatype was NUMBER(5,2), this means maximum three digit numbers with two decimal precision are allowed as an authentic input. Any number greater than that will generate an error as the given input can’t be stored in predefined space.**

SQL> @input

Enter value for rollno: 17BCE069

Enter value for name: YO YO

Enter value for dob: 14-jan-99

Enter value for club\_member:

Enter value for jee\_marks: 124

Enter value for hsc\_marks: 1000

old 1: insert into student values('&ROLLNO','&NAME','&DOB','&CLUB\_MEMBER','&JEE\_MARKS','&HSC\_MARKS')

new 1: insert into student values('17BCE069','YO YO','14-jan-99','','124','1000')

insert into student values('17BCE069','YO YO','14-jan-99','','124','1000')

\*

ERROR at line 1:

ORA-01438: value larger than specified precision allowed for this column

* **The OR keyword will display records having any one of two conditions true in where clause.**

select \* from student

where dob like '%JUL%' or dob like '%AUG%'

ROLLNO NAME DOB MEMBERS JEE HSC\_MARKS

-------- ------------------------------ --------- ------------------------------ --- ---------

17BCE065 Aum Naik 21-AUG-00 130 96.67

17BCE014 Khodidas Chauhan 21-JUL-00 AUGEN,ISTE 143 84.33

17BCE020 Dev Joshi 03-AUG-99 RCNI 180 94.33