

[1]. CREATING DATABASE STUDENT_RECORD

```
mysql> CREATE DATABASE STUDENT_RECORDS;
Query OK, 1 row affected (0.00 sec)

mysql> USE STUDENT_RECORDS;
Database changed
```

[2]. CREATING TABLE STUDENT

```
mysql> USE STUDENT_RECORDS;
Database changed
mysql> CREATE TABLE STUDENT(ADMNO INTEGER,STNAME VARCHAR(30),DOB DATE,ADDRESS VARCHAR(100),CITY VARCHAR(20),PHNO VARCHAR(12));
Query OK, 0 rows affected (0.18 sec)

mysql> DESC STUDENT;
+-----+-----+-----+-----+-----+-----+
| Field | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| ADMNO | int(11)        | YES  |     | NULL    |       |
| STNAME | varchar(30)    | YES  |     | NULL    |       |
| DOB    | date           | YES  |     | NULL    |       |
| ADDRESS | varchar(100)   | YES  |     | NULL    |       |
| CITY   | varchar(20)    | YES  |     | NULL    |       |
| PHNO   | varchar(12)    | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
6 rows in set (0.17 sec)
```

[3]. CREATING TABLE RESULT

```
mysql> CREATE TABLE RESULT(ADMNO INTEGER,SUBJECT VARCHAR(25),MARKS FLOAT);
Query OK, 0 rows affected (0.54 sec)

mysql> DESC RESULT;
+-----+-----+-----+-----+-----+-----+
| Field | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| ADMNO | int(11)        | YES  |     | NULL    |       |
| SUBJECT | varchar(25)    | YES  |     | NULL    |       |
| MARKS  | float          | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.20 sec)
```

[4]. ADDING PRIMARY KEY TO THE FIELD ADMNO

```
mysql> ALTER TABLE STUDENT ADD PRIMARY KEY(ADMNO);
Query OK, 0 rows affected (0.44 sec)
Records: 0 Duplicates: 0 Warnings: 0

mysql> DESC STUDENT;
+-----+-----+-----+-----+-----+-----+
| Field | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| ADMNO | int(11)        | NO   | PRI | 0       |       |
| STNAME | varchar(30)    | YES  |     | NULL    |       |
| DOB    | date           | YES  |     | NULL    |       |
| ADDRESS | varchar(100)   | YES  |     | NULL    |       |
| CITY   | varchar(20)    | YES  |     | NULL    |       |
| PHNO   | varchar(12)    | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
6 rows in set (0.08 sec)
```

[5]. MAKING FIELD ADDRESS AS NOT NULL IN TABLE STUDENT

```
mysql> ALTER TABLE STUDENT CHANGE ADDRESS ADDRESS VARCHAR(100) NOT NULL;  
Query OK, 0 rows affected (0.45 sec)  
Records: 0 Duplicates: 0 Warnings: 0
```

```
mysql> DESC STUDENT;
```

Field	Type	Null	Key	Default	Extra
ADMNO	int(11)	NO	PRI	0	
STNAME	varchar(30)	YES		NULL	
DOB	date	YES		NULL	
ADDRESS	varchar(100)	NO		NULL	
CITY	varchar(20)	YES		NULL	
PHNO	varchar(12)	YES		NULL	

6 rows in set (0.27 sec)

[6]. ADDING FIELD AADHAAR

```
mysql> ALTER TABLE STUDENT ADD AADHAAR VARCHAR(12) UNIQUE DEFAULT 'NA';  
Query OK, 0 rows affected (0.38 sec)  
Records: 0 Duplicates: 0 Warnings: 0
```

```
mysql> DESC STUDENT;
```

Field	Type	Null	Key	Default	Extra
ADMNO	int(11)	NO	PRI	0	
STNAME	varchar(30)	YES		NULL	
DOB	date	YES		NULL	
ADDRESS	varchar(100)	NO		NULL	
CITY	varchar(20)	YES		NULL	
PHNO	varchar(12)	YES		NULL	
AADHAAR	varchar(12)	YES	UNI	NA	

7 rows in set (0.16 sec)

[7]. CHANGING NAME OF FIELD FROM PHNO TO PHONENO

```
mysql> ALTER TABLE STUDENT CHANGE PHNO PHONENO VARCHAR(10);  
Query OK, 0 rows affected (0.55 sec)  
Records: 0 Duplicates: 0 Warnings: 0
```

```
mysql> DESC STUDENT;
```

Field	Type	Null	Key	Default	Extra
ADMNO	int(11)	NO	PRI	0	
STNAME	varchar(30)	YES		NULL	
DOB	date	YES		NULL	
ADDRESS	varchar(100)	NO		NULL	
CITY	varchar(20)	YES		NULL	
PHONENO	varchar(10)	YES		NULL	
AADHAAR	varchar(12)	YES	UNI	NA	

7 rows in set (0.19 sec)

[8]. INSERTING RECORDS INTO TABLE STUDENT

```
mysql> INSERT INTO STUDENT VALUES(1001,'AMAR','2005-10-30','SANJAY PLACE','AGRA','7418529632','124578963212');
Query OK, 1 row affected (0.12 sec)

mysql> INSERT INTO STUDENT VALUES(1002,'AMRIT','2005-07-01','SANJAY NAGAR','ETAH','5618529632','125526563212');
Query OK, 1 row affected (0.12 sec)

mysql> INSERT INTO STUDENT VALUES(1003,'AMAIRA','2005-07-11','VIJAY NAGAR','ETAH','5611245032','741526563212');
Query OK, 1 row affected (0.12 sec)

mysql> INSERT INTO STUDENT VALUES(1004,'ANANYA','2006-06-17','G.T. ROAD','ETAH','9011245122','741426563212');
Query OK, 1 row affected (0.12 sec)

mysql> INSERT INTO STUDENT VALUES(1005,'GAURI','2006-12-12','MEHTA PARK','ETAH','7414568523','952147854123');
Query OK, 1 row affected (0.13 sec)

mysql> INSERT INTO STUDENT VALUES(1006,'GARV','2006-11-02','VIJAY NAGAR','ETAH','1245788523','147852036123');
Query OK, 1 row affected (1.30 sec)

mysql> INSERT INTO STUDENT VALUES(1007,'GARVIT','2006-07-17','JAIN GALI','ETAH','1212045623','141245127123');
Query OK, 1 row affected (0.12 sec)

mysql> INSERT INTO STUDENT VALUES(1008,'GARIMA','2007-06-23','RAM BAGH','AGRA','1210245723','124575127123');
Query OK, 1 row affected (0.11 sec)

mysql> INSERT INTO STUDENT VALUES(1009,'PRIYA','2006-06-18','HATHI GATE','ETAH','9514745723','124124578963');
Query OK, 1 row affected (0.04 sec)

mysql> INSERT INTO STUDENT VALUES(1010,'PARI','2006-02-28','HATHI GATE','ETAH','9514124583','110258778963');
Query OK, 1 row affected (0.05 sec)

mysql> SELECT*FROM STUDENT;
+-----+-----+-----+-----+-----+-----+-----+
| ADMNO | STNAME | DOB       | ADDRESS      | CITY | PHONENO   | AADHAAR      |
+-----+-----+-----+-----+-----+-----+-----+
| 1001 | AMAR   | 2005-10-30 | SANJAY PLACE | AGRA | 7418529632 | 124578963212 |
| 1002 | AMRIT  | 2005-07-01 | SANJAY NAGAR | ETAH | 5618529632 | 125526563212 |
| 1003 | AMAIRA | 2005-07-11 | VIJAY NAGAR  | ETAH | 5611245032 | 741526563212 |
| 1004 | ANANYA | 2006-06-17 | G.T. ROAD    | ETAH | 9011245122 | 741426563212 |
| 1005 | GAURI  | 2006-12-12 | MEHTA PARK   | ETAH | 7414568523 | 952147854123 |
| 1006 | GARV   | 2006-11-02 | VIJAY NAGAR  | ETAH | 1245788523 | 147852036123 |
| 1007 | GARVIT | 2006-07-17 | JAIN GALI    | ETAH | 1212045623 | 141245127123 |
| 1008 | GARIMA | 2007-06-23 | RAM BAGH     | AGRA | 1210245723 | 124575127123 |
| 1009 | PRIYA  | 2006-06-18 | HATHI GATE   | ETAH | 9514745723 | 124124578963 |
| 1010 | PARI   | 2006-02-28 | HATHI GATE   | ETAH | 9514124583 | 110258778963 |
+-----+-----+-----+-----+-----+-----+-----+
10 rows in set (0.00 sec)
```

[9]. INSERTING RECORDS INTO TABLE RESULT

```
mysql> INSERT INTO RESULT VALUES(1001,'ENGLISH',97);
Query OK, 1 row affected (0.17 sec)

mysql> INSERT INTO RESULT VALUES(1001,'MATHS',99);
Query OK, 1 row affected (0.13 sec)

mysql> INSERT INTO RESULT VALUES(1002,'ENGLISH',91);
Query OK, 1 row affected (0.11 sec)

mysql> INSERT INTO RESULT VALUES(1002,'MATHS',69);
Query OK, 1 row affected (0.12 sec)

mysql> INSERT INTO RESULT VALUES(1003,'ENGLISH',85);
Query OK, 1 row affected (0.05 sec)

mysql> INSERT INTO RESULT VALUES(1003,'MATHS',78);
Query OK, 1 row affected (0.12 sec)

mysql> INSERT INTO RESULT VALUES(1004,'ENGLISH',100);
Query OK, 1 row affected (0.17 sec)

mysql> INSERT INTO RESULT VALUES(1004,'MATHS',98);
Query OK, 1 row affected (0.12 sec)

mysql> INSERT INTO RESULT VALUES(1005,'MATHS',55);
Query OK, 1 row affected (0.02 sec)

mysql> INSERT INTO RESULT VALUES(1005,'ENGLISH',99);
Query OK, 1 row affected (0.04 sec)

mysql> INSERT INTO RESULT VALUES(1006,'ENGLISH',78);
Query OK, 1 row affected (0.12 sec)

mysql> INSERT INTO RESULT VALUES(1006,'MATHS',45);
Query OK, 1 row affected (0.10 sec)

mysql> INSERT INTO RESULT VALUES(1007,'ENGLISH',65);
Query OK, 1 row affected (0.04 sec)

mysql> INSERT INTO RESULT VALUES(1007,'MATHS',92);
Query OK, 1 row affected (0.13 sec)

mysql> INSERT INTO RESULT VALUES(1008,'ENGLISH',.85);
Query OK, 1 row affected (0.07 sec)
```

```
mysql> INSERT INTO RESULT VALUES(1008,'MATHS',95);
Query OK, 1 row affected (0.10 sec)

mysql> INSERT INTO RESULT VALUES(1009,'ENGLISH',96);
Query OK, 1 row affected (0.13 sec)

mysql> INSERT INTO RESULT VALUES(1009,'MATHS',100);
Query OK, 1 row affected (0.12 sec)

mysql> INSERT INTO RESULT VALUES(1010,'ENGLISH',40);
Query OK, 1 row affected (0.11 sec)

mysql> INSERT INTO RESULT VALUES(1010,'MATHS',25);
Query OK, 1 row affected (0.14 sec)
```

```
mysql> SELECT*FROM RESULT;
+-----+-----+-----+
| ADMNO | SUBJECT | MARKS |
+-----+-----+-----+
| 1001 | ENGLISH | 97 |
| 1001 | MATHS | 99 |
| 1002 | ENGLISH | 91 |
| 1002 | MATHS | 69 |
| 1003 | ENGLISH | 85 |
| 1003 | MATHS | 78 |
| 1004 | ENGLISH | 100 |
| 1004 | MATHS | 98 |
| 1005 | MATHS | 55 |
| 1005 | ENGLISH | 99 |
| 1006 | ENGLISH | 78 |
| 1006 | MATHS | 45 |
| 1007 | ENGLISH | 65 |
| 1007 | MATHS | 92 |
| 1008 | ENGLISH | 85 |
| 1008 | MATHS | 95 |
| 1009 | ENGLISH | 96 |
| 1009 | MATHS | 100 |
| 1010 | ENGLISH | 40 |
| 1010 | MATHS | 25 |
+-----+-----+-----+
20 rows in set (0.09 sec)
```

[10]. DISPLAYING ALL RECORDS WHERE ADMNO IS BETWEEN 1003 AND 1007 FROM STUDENT

```
mysql> SELECT*FROM STUDENT WHERE ADMNO BETWEEN 1003 AND 1007;
```

ADMNO	STNAME	DOB	ADDRESS	CITY	PHONENO	AADHAAR
1003	AMAIRA	2005-07-11	VIJAY NAGAR	ETAH	5611245032	741526563212
1004	ANANYA	2006-06-17	G.T. ROAD	ETAH	9011245122	741426563212
1005	GAURI	2006-12-12	MEHTA PARK	ETAH	7414568523	952147854123
1006	GARV	2006-11-02	VIJAY NAGAR	ETAH	1245788523	147852036123
1007	GARVIT	2006-07-17	JAIN GALI	ETAH	1212045623	141245127123

5 rows in set (0.18 sec)

[11]. DISPLAYING ALL RECORDS OF STUDENT WHERE CITY IS DELHI OR AGRA

```
mysql> SELECT*FROM STUDENT WHERE CITY IN('DELHI','AGRA');
```

ADMNO	STNAME	DOB	ADDRESS	CITY	PHONENO	AADHAAR
1001	AMAR	2005-10-30	SANJAY PLACE	AGRA	7418529632	124578963212
1008	GARIMA	2007-06-23	RAM BAGH	AGRA	1210245723	124575127123
1011	VANSH	2006-10-22	ANAND VIHAR	DELHI	7485961587	954782103654

3 rows in set (0.01 sec)

[12]. DISPLAYING RECORDS WHERE CITY IS EXCEPT DELHI OR AGRA

```
mysql> SELECT*FROM STUDENT WHERE CITY NOT IN('DELHI','AGRA');
```

ADMNO	STNAME	DOB	ADDRESS	CITY	PHONENO	AADHAAR
1002	AMRIT	2005-07-01	SANJAY NAGAR	ETAH	5618529632	125526563212
1003	AMAIRA	2005-07-11	VIJAY NAGAR	ETAH	5611245032	741526563212
1004	ANANYA	2006-06-17	G.T. ROAD	ETAH	9011245122	741426563212
1005	GAURI	2006-12-12	MEHTA PARK	ETAH	7414568523	952147854123
1006	GARV	2006-11-02	VIJAY NAGAR	ETAH	1245788523	147852036123
1007	GARVIT	2006-07-17	JAIN GALI	ETAH	1212045623	141245127123
1009	PRIYA	2006-06-18	HATHI GATE	ETAH	9514745723	124124578963
1010	PARI	2006-02-28	HATHI GATE	ETAH	9514124583	110258778963

8 rows in set (0.00 sec)

[13]. DISPLAYING RECORDS OF STUDENTS WHOSE NAME START WITH THE LETTER A

```
mysql> SELECT*FROM STUDENT WHERE STNAME LIKE 'A%';
```

ADMNO	STNAME	DOB	ADDRESS	CITY	PHONENO	AADHAAR
1001	AMAR	2005-10-30	SANJAY PLACE	AGRA	7418529632	124578963212
1002	AMRIT	2005-07-01	SANJAY NAGAR	ETAH	5618529632	125526563212
1003	AMAIRA	2005-07-11	VIJAY NAGAR	ETAH	5611245032	741526563212
1004	ANANYA	2006-06-17	G.T. ROAD	ETAH	9011245122	741426563212

4 rows in set (0.00 sec)

[14]. DISPLAYING RECORDS OF STUDENTS WHOSE NAME START WITH A AND HAS EXACTLY 4 CHARACTERS.

```
mysql> SELECT*FROM STUDENT WHERE STNAME LIKE 'A____';
```

ADMNO	STNAME	DOB	ADDRESS	CITY	PHONENO	AADHAAR
1001	AMAR	2005-10-30	SANJAY PLACE	AGRA	7418529632	124578963212

```
1 row in set (0.00 sec)
```

[15]. DISPLAYING RECORDS OF STUDENTS IN ASCENDING OF THEIR NAMES

```
mysql> SELECT*FROM STUDENT ORDER BY STNAME;
```

ADMNO	STNAME	DOB	ADDRESS	CITY	PHONENO	AADHAAR
1003	AMAIRA	2005-07-11	VIJAY NAGAR	ETAH	5611245032	741526563212
1001	AMAR	2005-10-30	SANJAY PLACE	AGRA	7418529632	124578963212
1002	AMRIT	2005-07-01	SANJAY NAGAR	ETAH	5618529632	125526563212
1004	ANANYA	2006-06-17	G.T. ROAD	ETAH	9011245122	741426563212
1008	GARIMA	2007-06-23	RAM BAGH	AGRA	1210245723	124575127123
1006	GARV	2006-11-02	VIJAY NAGAR	ETAH	1245788523	147852036123
1007	GARVIT	2006-07-17	JAIN GALI	ETAH	1212045623	141245127123
1005	GAURI	2006-12-12	MEHTA PARK	ETAH	7414568523	952147854123
1010	PARI	2006-02-28	HATHI GATE	ETAH	9514124583	110258778963
1009	PRIYA	2006-06-18	HATHI GATE	ETAH	9514745723	124124578963
1011	VANSH	2006-10-22	ANAND VIHAR	DELHI	7485961587	954782103654

```
11 rows in set (0.15 sec)
```

[16]. DISPLAYING RECORDS OF STUDENTS IN DESCENDING ORDER OF THEIR DOB

```
mysql> SELECT*FROM STUDENT ORDER BY DOB DESC;
```

ADMNO	STNAME	DOB	ADDRESS	CITY	PHONENO	AADHAAR
1008	GARIMA	2007-06-23	RAM BAGH	AGRA	1210245723	124575127123
1005	GAURI	2006-12-12	MEHTA PARK	ETAH	7414568523	952147854123
1006	GARV	2006-11-02	VIJAY NAGAR	ETAH	1245788523	147852036123
1011	VANSH	2006-10-22	ANAND VIHAR	DELHI	7485961587	954782103654
1007	GARVIT	2006-07-17	JAIN GALI	ETAH	1212045623	141245127123
1009	PRIYA	2006-06-18	HATHI GATE	ETAH	9514745723	124124578963
1004	ANANYA	2006-06-17	G.T. ROAD	ETAH	9011245122	741426563212
1010	PARI	2006-02-28	HATHI GATE	ETAH	9514124583	110258778963
1001	AMAR	2005-10-30	SANJAY PLACE	AGRA	7418529632	124578963212
1003	AMAIRA	2005-07-11	VIJAY NAGAR	ETAH	5611245032	741526563212
1002	AMRIT	2005-07-01	SANJAY NAGAR	ETAH	5618529632	125526563212

```
11 rows in set (0.00 sec)
```


[17]. UPDATING A RECORD IN TABLE STUDENT

```
mysql> UPDATE STUDENT SET STNAME="ANISHA" WHERE ADMNO=1004;  
Query OK, 1 row affected (0.05 sec)  
Rows matched: 1  Changed: 1  Warnings: 0
```

```
mysql> SELECT*FROM STUDENT;
```

ADMNO	STNAME	DOB	ADDRESS	CITY	PHONENO	AADHAAR
1001	AMAR	2005-10-30	SANJAY PLACE	AGRA	7418529632	124578963212
1002	AMRIT	2005-07-01	SANJAY NAGAR	ETAH	5618529632	125526563212
1003	AMAIRA	2005-07-11	VIJAY NAGAR	ETAH	5611245032	741526563212
1004	ANISHA	2006-06-17	G.T. ROAD	ETAH	9011245122	741426563212
1005	GAURI	2006-12-12	MEHTA PARK	ETAH	7414568523	952147854123
1006	GARV	2006-11-02	VIJAY NAGAR	ETAH	1245788523	147852036123
1007	GARVIT	2006-07-17	JAIN GALI	ETAH	1212045623	141245127123
1008	GARIMA	2007-06-23	RAM BAGH	AGRA	1210245723	124575127123
1009	PRIYA	2006-06-18	HATHI GATE	ETAH	9514745723	124124578963
1010	PARI	2006-02-28	HATHI GATE	ETAH	9514124583	110258778963
1011	VANSH	2006-10-22	ANAND VIHAR	DELHI	7485961587	954782103654

```
11 rows in set (0.00 sec)
```

[18]. DELETING A RECORD FROM TABLE STUDENT

```
mysql> DELETE FROM STUDENT WHERE ADMNO=1011;  
Query OK, 1 row affected (0.12 sec)
```

```
mysql> SELECT*FROM STUDENT;
```

ADMNO	STNAME	DOB	ADDRESS	CITY	PHONENO	AADHAAR
1001	AMAR	2005-10-30	SANJAY PLACE	AGRA	7418529632	124578963212
1002	AMRIT	2005-07-01	SANJAY NAGAR	ETAH	5618529632	125526563212
1003	AMAIRA	2005-07-11	VIJAY NAGAR	ETAH	5611245032	741526563212
1004	ANISHA	2006-06-17	G.T. ROAD	ETAH	9011245122	741426563212
1005	GAURI	2006-12-12	MEHTA PARK	ETAH	7414568523	952147854123
1006	GARV	2006-11-02	VIJAY NAGAR	ETAH	1245788523	147852036123
1007	GARVIT	2006-07-17	JAIN GALI	ETAH	1212045623	141245127123
1008	GARIMA	2007-06-23	RAM BAGH	AGRA	1210245723	124575127123
1009	PRIYA	2006-06-18	HATHI GATE	ETAH	9514745723	124124578963
1010	PARI	2006-02-28	HATHI GATE	ETAH	9514124583	110258778963

```
10 rows in set (0.00 sec)
```


[19]. DISPLAYING ADMNO AND TOTAL MARKS FROM TABLE RESULT

```
mysql> SELECT ADMNO,SUM(MARKS) FROM RESULT GROUP BY ADMNO;
+-----+-----+
| ADMNO | SUM(MARKS) |
+-----+-----+
| 1001 | 196 |
| 1002 | 160 |
| 1003 | 163 |
| 1004 | 198 |
| 1005 | 154 |
| 1006 | 123 |
| 1007 | 157 |
| 1008 | 180 |
| 1009 | 196 |
| 1010 | 65 |
+-----+-----+
10 rows in set (0.02 sec)
```

[20]. DISPLAYING UNIQUE CITY FROM TABLE STUDENT

```
mysql> SELECT DISTINCT(CITY) FROM STUDENT;
+-----+
| CITY |
+-----+
| AGRA |
| ETAH |
+-----+
2 rows in set (0.00 sec)
```

[21]. DISPALYING ADMNO AND TOTAL MARKS OF A STUDENT FROM TABLE RESULT

```
mysql> SELECT ADMNO,SUM(MARKS) FROM RESULT GROUP BY ADMNO HAVING ADMNO=1002;
+-----+-----+
| ADMNO | SUM(MARKS) |
+-----+-----+
| 1002 | 160 |
+-----+-----+
1 row in set (0.03 sec)
```

[22]. DISPLAYING NAME AND MARKS OF ALL STUDENTS IN ENGLISH SUBJECT

```
mysql> SELECT STNAME,MARKS FROM STUDENT,RESULT WHERE STUDENT.ADMNO=RESULT.ADMNO AND SUBJECT='ENGLISH';
+-----+-----+
| STNAME | MARKS |
+-----+-----+
| AMAR | 97 |
| AMRIT | 91 |
| AMAIRA | 85 |
| ANISHA | 100 |
| GAURI | 99 |
| GARV | 78 |
| GARVIT | 65 |
| GARIMA | 85 |
| PRIYA | 96 |
| PARI | 40 |
+-----+-----+
10 rows in set (0.00 sec)
```

[23]. DISPLAYING 30% MARKS OF ALL SUBJECTS WITH CALCULATING FIELD TITLE AS 'CONVERTED' FROM TABLE RESULT

```
mysql> SELECT MARKS*30/100 CONVERTED FROM RESULT;
```

CONVERTED
29.1
29.7
27.3
20.7
25.5
23.4
30
29.4
16.5
29.7
23.4
13.5
19.5
27.6
25.5
28.5
28.8
30
12
7.5

```
20 rows in set (0.12 sec)
```