Spring AU Feb Batch 1 Ayushi Garg

```
mysql> create database Student;
Query OK, 1 row affected (0.01 sec)
mysql> show databases;
 Database
 information_schema
 mysql
  performance schema
  sakila
  student
  SVS
 world
7 rows in set (0.02 sec)
mysql> use Student;
Database changed
mysql> create table StudentBasicInformation(
    -> StudentName VARCHAR(20) not null,
    -> StudentSurname VARCHAR(20) not null,
    -> StudentRollNo VARCHAR(20) not null primary key,
    -> StudentAddress VARCHAR(20) not null,
    -> ScholarshipOpted VARCHAR(4) not null,
    -> StudentMobNo VARCHAR(10) not null,
    -> StudentAge VARCHAR(2) not null)
Query OK, 0 rows affected (0.08 sec)
mysql> desc StudentBasicInformation;
 Field
                     Type | Null | Key | Default | Extra |
  StudentName varchar(20) NO
                                                    NULL
 StudentSurname | varchar(20) | NO |
StudentRollNo | varchar(20) | NO |
StudentAddress | varchar(20) | NO |
ScholarshipOpted | varchar(4) | NO |
StudentMobNo | varchar(10) | NO |
                                                    NULL
                                               PRI | NULL
                                                    NULL
                                                    NULL
                                                     NULL
 StudentAge | varchar(2) | NO |
                                                    NULL
rows in set (0.01 sec)
nysql>
```

```
mysql> create table StudentAdmissionPaymentDetails(
   -> StudentRollNo VARCHAR(20) not null primary key,
   -> AmountPaid VARCHAR(10) not null,
   -> AmountBalance VARCHAR(10) not null,
   -> StudentFeePaid VARCHAR(4) not null,
   -> FeesTakenBy VARCHAR(20) not null,
   -> StudentPaymentMode VARCHAR(10) not null);
Query OK, 0 rows affected (0.04 sec)
mysql> desc StudentAdmissionPaymentDetails;
                                 | Null | Key | Default | Extra
                    Type
 StudentRollNo
                    | varchar(20) | NO
                                        | PRI | NULL
 AmountPaid
                    varchar(10) NO
                                               NULL
 AmountBalance
                    | varchar(10) | NO
                                               NULL
                    varchar(4)
 StudentFeePaid
                                 NO
                                               NULL
                 varchar(20) NO
 FeesTakenBv
                                               NULL
 StudentPaymentMode | varchar(10) | NO
                                              NULL
 rows in set (0.02 sec)
mysql> create table StudentSubjectInformation(
   -> StudentRollNo VARCHAR(20) not null primary key,
   -> SubjectOpted VARCHAR(20) not null,
   -> SubjectTotalMarks VARCHAR(3) not null,
   -> SubjectObtainedMarks VARCHAR(3) not null,
   -> StudentMarksPercentage VARCHAR(10));
Query OK, 0 rows affected (0.04 sec)
mysql> desc StudentSubjectInformation;
 Field
                                      | Null | Key | Default | Extra
                        Type
 StudentRollNo
                         varchar(20)
                                              PRI NULL
                                       NO
                        varchar(20) |
varchar(3) |
 SubjectOpted
                                       NO
                                                    NULL
                                      NO
 SubjectTotalMarks
                                                    NULL
 SubjectObtainedMarks
                        varchar(3)
                                       NO
                                                    NULL
 StudentMarksPercentage | varchar(10) | YES |
                                                  NULL
5 rows in set (0.02 sec)
mysql>
```

```
mysql> create table StudentScholarshipInformation(
   -> StudentRollNo VARCHAR(20) not null,
   -> ScholarshipName VARCHAR(20) not null,
   -> ScholarshipDesc VARCHAR(20) not null,
   -> ScholarshipAmount VARCHAR(10) not null,
   -> ScholarshipCategory VARCHAR(20));
Query OK, 0 rows affected (0.04 \text{ sec})
mysql> desc StudentScholarshipInformation;
 Field
                                     Null | Key | Default | Extra
                        Type
                        varchar(20)
 StudentRollNo
                                      NO
                                                   NULL
 ScholarshipName
                        varchar(20)
                                      NO
                                                   NULL
 ScholarshipDesc
                       varchar(20)
                                      NO
                                                   NULL
 ScholarshipAmount
                       varchar(10)
                                    NO
                                                   NULL
 ScholarshipCategory | varchar(20) | YES
                                                   NULL
5 rows in set (0.02 sec)
```

2,3,4.

```
mysql> insert into studentadmissionpaymentdetails values (1,20,480,'Y','John','Online');
Query OK, 1 row affected (0.03 sec)
mysql> insert into studentadmissionpaymentdetails values (1,30,470,'N','John','Online');
ERROR 1062 (23000): Duplicate entry '1' for key 'studentadmissionpaymentdetails.PRIMARY
mysql> insert into studentadmissionpaymentdetails values (2,30,470,'N','John','Online');
Query OK, 1 row affected (0.01 sec)
mysql> insert into studentadmissionpaymentdetails values (3,50,450,'N','John','Online');
Query OK, 1 row affected (0.00 sec)
mysql> insert into studentadmissionpaymentdetails values (4,100,400,'Y','John','Online');
Query OK, 1 row affected (0.01 sec)
mysql> insert into studentadmissionpaymentdetails values (5,200,300,'Y','John','Cash');
Query OK, 1 row affected (0.00 sec)
mysql> insert into studentadmissionpaymentdetails values (6,100,400,'Y','John','Cash');
Query OK, 1 row affected (0.01 sec)
mysql> insert into studentadmissionpaymentdetails values (6,150,350,'N','John','Cash');
ERROR 1062 (23000): Duplicate entry '6' for key 'studentadmissionpaymentdetails.PRIMARY'
mysql> insert into studentadmissionpaymentdetails values (7,150,350,'N','John','Cash');
Query OK, 1 row affected (0.00 sec)
mysql> insert into studentadmissionpaymentdetails values (8,30,470,'N','John','Cash');
Query OK, 1 row affected (0.01 sec)
mysql> insert into studentadmissionpaymentdetails values (9,150,350,'Y','John','Online');
Query OK, 1 row affected (0.01 sec)
mysql> insert into studentadmissionpaymentdetails values (10,150,350,'Y','John','Online');
Query OK, 1 row affected (0.01 sec)
```

```
mysql> select * from studentadmissionpaymentdetails;
 StudentRollNo | AmountPaid | AmountBalance | StudentFeePaid | FeesTakenBy | StudentPaymentMode |
                   20
                                480
                                                                    John
                                                                                   Online
                   150
                                 350
 10
                                                                    John
                                                                                   Online 0
                   30
                                 470
                                                 Ν
                                                                    John
                                                                                   Online
                   50
                                450
                                                                    John
                                                                                   Online
                                                 Ν
                   100
                                 400
                                                                    John
                                                                                   Online
                                 300
                   200
                                                                    John
                                                                                   Cash
                   100
                                 400
                                                                    John
                                                                                   Cash
                   150
                                 350
                                                 Ν
                                                                                   Cash
 7
                                                                    John
 8
                   30
                                470
                                                                    John
                                                                                   Cash
 g
                  150
                                350
                                                 Υ
                                                                                  Online
                                                                    John
10 rows in set (0.00 sec)
```

```
nysql> insert into studentbasicinformation values ('Ayushi','Garg',1,'Jaipur','Y',9999988888,21);
Query OK, 1 row affected (0.01 sec)
mysql> insert into studentbasicinformation values ('Ayushi','Gupta',2,'Delhi','Y',9988998899,22);
Query OK, 1 row affected (0.01 sec)
nysql> insert into studentbasicinformation values ('Simran','Singh',3,'Pune','N',90022334400,21);
ERROR 1406 (22001): Data too long for column 'StudentMobNo' at row 1
mysql> insert into studentbasicinformation values ('Simran','Singh',3,'Pune','N',9002233440,21);
Query OK, 1 row affected (0.00 sec)
nysql> insert into studentbasicinformation values ('Kajal','Verma',4,'Chennai','N',8768765432,20);
Query OK, 1 row affected (0.01 sec)
mysql> insert into studentbasicinformation values ('Rahul','Joshi',5,'Chennai','Y',7742775566,22);
Query OK, 1 row affected (0.00 sec)
mysql> insert into studentbasicinformation values ('Amay','Bansal',6,'Jaipur','Y',9887098870,22);
Query OK, 1 row affected (0.01 sec)
nysql> insert into studentbasicinformation values ('Piyush','Bhat',7,'Delhi','Y',7788977889,21);
Query OK, 1 row affected (0.00 sec)
mysql> insert into studentbasicinformation values ('Manju','Agarwal',8,'Bhopal','N',8806688066,21);
Query OK, 1 row affected (0.01 sec)
mysql> insert into studentbasicinformation values ('Pradeep','Kumar',9,'Ranchi','Y',7742773522,21);
Query OK, 1 row affected (0.00 sec)
nysql> insert into studentbasicinformation values ('Rishi','Garg',10,'Ranchi','Y',6907869078,21);
Query OK, 1 row affected (0.00 sec)
```

StudentName	StudentSurname	StudentRollNo	StudentAddress	ScholarshipOpted	StudentMobNo	StudentAge
Ayushi	Garg	1	Jaipur	Y	9999988888	21
Rishi	Garg	10	Ranchi	Υ	6907869078	21
Ayushi	Gupta	2	Delhi	Υ	9988998899	22
Simran	Singh	3	Pune	N	9002233440	21
Kajal	Verma	4	Chennai	N	8768765432	20
Rahul	Joshi	5	Chennai	Υ	7742775566	22
Amay	Bansal	6	Jaipur	Υ	9887098870	22
Piyush	Bhat	7	Delhi	Υ	7788977889	21
Manju	Agarwal	8	Bhopal	N	8806688066	21
Pradeep	Kumar	9	Ranchi	Υ	7742773522	21

```
mysql> insert into studentscholarshipinformation values (1,'SQL','Advance',50000,'Allocated');
Query OK, 1 row affected (0.01 sec)
mysql> insert into studentscholarshipinformation values (2,'SQL','Advance',50000,'Allocated');
Query OK, 1 row affected (0.00 sec)
mysql> insert into studentscholarshipinformation values (3,'JAVA','Advance',60000,'Notallocated');
Query OK, 1 row affected (0.01 sec)
mysql> insert into studentscholarshipinformation values (4,'JAVA','Begineer',60500,'Allocated');
Query OK, 1 row affected (0.01 sec)
mysql> insert into studentscholarshipinformation values (5,'JAVA','Begineer',60500,'Notallocated');
Query OK, 1 row affected (0.01 sec)
mysql> insert into studentscholarshipinformation values (6,'SQL','Begineer',40000,'Allocated');
Query OK, 1 row affected (0.00 sec)
mysql> insert into studentscholarshipinformation values (7,'Python','Advance',70000,'Allocated');
Query OK, 1 row affected (0.01 sec)
mysql> insert into studentscholarshipinformation values (8,'Python','Advance',70000,'Allocated');
Query OK, 1 row affected (0.01 sec)
mysql> insert into studentscholarshipinformation values (9,'Python','Advance',70000,'Notallocated');
Query OK, 1 row affected (0.01 sec)
mysql> insert into studentscholarshipinformation values (10,'Python','Advance',70000,'Notallocated');
Query OK, 1 row affected (0.01 sec)
```

StudentRollNo	ScholarshipName ScholarshipDesc		ScholarshipAmount	ScholarshipCategory	
1	SQL	Advance	 50000	Allocated	
2	SQL	Advance	50000	Allocated	
3	JAVA	Advance	60000	Notallocated	
4	JAVA	Begineer	60500	Allocated	
5	JAVA	Begineer	60500	Notallocated	
6	SQL	Begineer	40000	Allocated	
7	Python	Advance	70000	Allocated	
8	Python	Advance	70000	Allocated	
9	Python	Advance	70000	Notallocated	
10	Python	Advance	70000	Notallocated	

```
mysql> insert into studentsubjectinformation values (1,'Computer',100,40,0.40);
Query OK, 1 row affected (0.01 sec)
mysql> insert into studentsubjectinformation values (2,'Computer',100,50,0.50);
Query OK, 1 row affected (0.01 sec)
mysql> insert into studentsubjectinformation values (3,'Computer',100,42,0.42);
Query OK, 1 row affected (0.01 sec)
mysql> insert into studentsubjectinformation values (4,'Maths',100,80,0.80);
Query OK, 1 row affected (0.01 sec)
mysql> insert into studentsubjectinformation values (5,'Maths',100,85,0.85);
Query OK, 1 row affected (0.00 sec)
mysql> insert into studentsubjectinformation values (6,'Maths',100,90,0.90);
Query OK, 1 row affected (0.01 sec)
mysql> insert into studentsubjectinformation values (7,'Maths',100,10,0.10);
Query OK, 1 row affected (0.01 sec)
mysql> insert into studentsubjectinformation values (8,'English',100,15,0.15);
Query OK, 1 row affected (0.01 sec)
mysql> insert into studentsubjectinformation values (9,'English',100,62,0.62);
Query OK, 1 row affected (0.01 sec)
mysql> insert into studentsubjectinformation values (10,'English',100,70,0.70);
Query OK, 1 row affected (0.01 sec)
```

StudentRollNo	SubjectOpted	SubjectTotalMarks	SubjectObtainedMarks	StudentMarksPercentage
1	Computer	100	40	0.40
10	English	100	70	0.70
2	Computer	100	50	0.50
3	Computer	100	42	0.42
4	Maths	100	80	0.80
5	Maths	100	85	0.85
6	Maths	100	90	0.90
7	Maths	100	10	0.10
8	English	100	15	0.15
9	English	100	62	0.62

5,6.

```
mysql> update studentbasicinformation set studentaddress='Goa' where studentrollno=2;
Query OK, 1 row affected (0.01 sec)
Rows matched: 1 Changed: 1 Warnings: 0

mysql> update studentbasicinformation set studentaddress='Goa' where studentrollno=4;
Query OK, 1 row affected (0.01 sec)
Rows matched: 1 Changed: 1 Warnings: 0

mysql> update studentbasicinformation set studentaddress='Goa' where studentrollno=6;
Query OK, 1 row affected (0.01 sec)
Rows matched: 1 Changed: 1 Warnings: 0

mysql> update studentbasicinformation set studentaddress='Goa' where studentrollno=8;
Query OK, 1 row affected (0.01 sec)
Rows matched: 1 Changed: 1 Warnings: 0

mysql> update studentbasicinformation set studentaddress='Goa' where studentrollno=10;
Query OK, 1 row affected (0.01 sec)
Rows matched: 1 Changed: 1 Warnings: 0
```

StudentName	StudentSurname	StudentRollNo	StudentAddress	ScholarshipOpted	StudentMobNo	StudentAge
Ayushi	Garg	1	Jaipur	Y	9999988888	21
Rishi	Garg	10	Goa	Υ	6907869078	21
Ayushi	Gupta	2	Goa	Υ	9988998899	22
Simran	Singh	3	Pune	N	9002233440	21
Kajal	Verma	4	Goa	N	8768765432	20
Rahul	Joshi	5	Chennai	Υ	7742775566	22
Amay	Bansal	6	Goa	Υ	9887098870	22
Piyush	Bhat	7	Delhi	Υ	7788977889	21
Manju	Agarwal	8	Goa	N	8806688066	21
Pradeep	Kumar	9	Ranchi	Υ	7742773522	21

StudentRollNo	ScholarshipName	ScholarshipDesc	ScholarshipAmount	ScholarshipCategory
3	JAVA	Advance	60000	Notallocated
4	JAVA	Begineer	60500	Allocated
5	JAVA	Begineer	60500	Notallocated
7	Python	Advance	70000	Allocated
8	Python	Advance	70000	Allocated
9	Python	Advance	70000	Notallocated
10	Python	Advance	70000	Notallocated

```
mysql> select * from studentscholarshipinformation where scholarshipcategory='Notallocated';
 StudentRollNo | ScholarshipName | ScholarshipDesc | ScholarshipAmount | ScholarshipCategory |
                  JAVA
                                     Advance
                                                        60000
                                                                            Notallocated
                  JAVA
                                                        60500
                                                                            {\tt Notallocated}
                                     Begineer
                  Python
                                     Advance
                                                        70000
                                                                            Notallocated
 10
                  Python
                                     Advance
                                                        70000
                                                                            Notallocated
4 rows in set (0.00 sec)
```

```
ysql> create procedure percent_upadate()
   -> begin
   -> update studentsubjectinformation set StudentMarksPercentage = (SubjectObtainedMarks/SubjectTotalMarks)*100;
Query OK, 0 rows affected (0.00 sec)
mysql> call percent_upadate()
Query OK, 10 rows affected (0.01 sec)
nysql> select * from studentsubjectinformation;
 StudentRollNo | SubjectOpted | SubjectTotalMarks | SubjectObtainedMarks
                                                                                StudentMarksPercentage
                  Computer
                                  100
                                                        40
                                                                                40
 10
                  English
                                  100
                  Computer
                                                                                50
                                  100
                                                       50
                  Computer
                                  100
                  Maths
                                  100
                                                        80
                                                                                80
                  Maths
                                  100
                                                       85
                                                                                85
                  Maths
                                  100
                                                                                90
                  Maths
                                  100
                                                        10
                                                                                10
                  English
 8
                                  100
                  English
                                  100
10 rows in set (0.00 sec)
nysql>
```

```
mysql> create procedure fill_category()
    -> begin
    -> update studentsubjectinformation inner join studentscholarshipinformation on studentscholarshipinform
ation.StudentRollNo = studentsubjectinformation.StudentRollNo set ScholarshipCategory = 'Allocated' where St
udentMarksPercentage>=80;
    -> update studentsubjectinformation inner join studentscholarshipinformation on studentscholarshipinform
ation.StudentRollNo = studentsubjectinformation.StudentRollNo set ScholarshipCategory = 'Partial-Allocated'
where StudentMarksPercentage>=50 and StudentMarksPercentage<80;
    -> update studentsubjectinformation inner join studentscholarshipinformation on studentscholarshipinform
ation.StudentRollNo = studentsubjectinformation.StudentRollNo set ScholarshipCategory = 'Not-Allocated' wher
e StudentMarksPercentage<50;
    -> end
Query OK, 0 rows affected (0.00 sec)
mysql> call fill category();
    -> //
Query OK, 4 rows affected (0.02 sec)
mysql> select * from studentscholarshipinformation;
 StudentRollNo | ScholarshipName | ScholarshipDesc | ScholarshipAmount | ScholarshipCategory
                                                       50000
                                                                           Not-Allocated
                  SOL
                                    Advance
                  SQL
                                                                           Partial-Allocated
                                                       50000
  2
                                    Advance
                  JAVA
                                    Advance
                                                       60000
                                                                           Not-Allocated
                  JAVA
                                    Begineer
                                                       60500
                                                                           Allocated
                                    Begineer
                  JAVA
                                                       60500
                                                                           Allocated
                  SQL
                                    Begineer
                                                       40000
                                                                           Allocated
                  Python
                                    Advance
                                                       70000
                                                                           Not-Allocated
                                    Advance
                  Python
                                                       70000
                                                                           Not-Allocated
                  Python
                                                       70000
                                                                           Partial-Allocated
                                    Advance
                  Python
                                                                           Partial-Allocated
                                    Advance
                                                       70000
  10
10 rows in set (0.00 sec)
```

```
mysql> create view `DetailsOfBalanceAmount` as select a.StudentRollNo, a.StudentName, a.StudentSurname, b.A
ountBalance from studentbasicinformation as a inner join studentadmissionpaymentdetails as b on a StudentRol
lNo =b.StudentRollNo;
Query OK, 0 rows affected (0.01 sec)
nysql> select * from `DetailsOfBalanceAmount`;
 StudentRollNo | StudentName | StudentSurname | AmountBalance
                  Ayushi
                                Garg
 10
                  Rishi
                                Garg
                                                  350
                                                  470
                  Avushi
                                Gupta
                  Simran
                                Singh
                                                  450
                  Kajal
                                Verma
                                                  400
                  Rahul
                                Joshi
                                                  300
                  Amay
                                Bansal
                                                  400
 6
                  Piyush
                                Bhat
                                                  350
                  Manju
                                Agarwal
                                                  470
                  Pradeep
                                Kumar
                                                  350
10 rows in set (0.00 sec)
mysql>
```

```
nysql> select * from studentbasicinformation inner join studentscholarshipinformation on studentbasicinform
tion.StudentRollNo = studentscholarshipinformation.StudentRollNo where ScholarshipCategory = 'Not-Allocated'
StudentName | StudentSurname | StudentRollNo | StudentAddress | ScholarshipOpted | StudentMobNo | StudentA
ge | StudentRollNo | ScholarshipName | ScholarshipDesc | ScholarshipAmount | ScholarshipCategory |
            | Garg
| SQL
                                          | Jaipur
                                                                          9999988888
                                 Advance
                                                50000
                                                                   Not-Allocated
  1
            Singh
                                          Pune
                                                                          9002233440
                                                         N
 Simran
                                                                                         21
                 gn
| JAVA
                                                                   | Not-Allocated
                                                 60000
                                 Advance
                                          | Delhi
 Piyush
            Bhat
                                                                           7788977889
                                                                                         21
               Python
                                                 70000
                                 Advance
                                                                   | Not-Allocated
  1 7
                                          Goa
 Manju
            Agarwal
                                                                          8806688066
                                                                                         21
                                 Advance
                                                 70000
                                                                   | Not-Allocated
               | Python
 rows in set (0.00 sec)
nysql>
```

13.

```
mysql> select * from studentbasicinformation where StudentRollNo in (select StudentRollNo from studentsubjec
tinformation order by StudentMarksPercentage desc limit 5);
-> //
ERROR 1235 (42000): This version of MySQL doesn't yet support 'LIMIT & IN/ALL/ANY/SOME subquery'
mysql>
```

Natural Join -

```
sql> select * from studentsubjectinformation natural join studentscholarshipinformation where SubjectOpted,
 'Maths';
-> //
 StudentRollNo | SubjectOpted | SubjectTotalMarks | SubjectObtainedMarks | StudentMarksPercentage | Scholar
.
shipName | ScholarshipDesc | ScholarshipAmount | ScholarshipCategory |
                            100
                                               80
             Maths
                                                                     80
                                                                                            JAVA
       Begineer
                        60500
                                           | Allocated
              | Maths
                           | 100
                                                                     85
                                                                                            I JAVA
                        60500
                                           | Allocated
        Begineer
              Maths
                            100
                                                                     90
                                                                                            SQL
        Begineer
                        40000
                                           | Allocated
             Maths
                           100
                                                                     10
                                                                                            | Python
                        70000
        Advance
                                           | Not-Allocated
rows in set (0.00 sec)
```

Inner join -

```
mysql> select * from studentbasicinformation inner join studentscholarshipinformation on studentbasicinforma
tion.StudentRollNo = studentscholarshipinformation.StudentRollNo where ScholarshipCategory = 'Not-Allocated
 StudentName | StudentSurname | StudentRollNo | StudentAddress | ScholarshipOpted | StudentMobNo | StudentA
  | StudentRollNo | ScholarshipName | ScholarshipDesc | ScholarshipAmount | ScholarshipCategory |
 Ayushi
                                            | Jaipur
                                                                              9999988888
                                                                                            21
                 Ī SQL
                                   Advance
                                                   50000
                                                                      | Not-Allocated
   1
                                            Pune
                                                                              9002233440
 Simran
             | Singh
                             | 3
                                                            N
                                                                                             21
  3
                  JAVA
                                   Advance
                                                    60000
                                                                       | Not-Allocated
 Piyush
             Bhat
                                            | Delhi
                                                                              7788977889
                                                                                             21
                                                   70000
                Python
                                   Advance
                                                                       | Not-Allocated
  7
                             8
                                                                              1 8806688066
                                                                                             21
 Maniu
             Agarwal
                 | Python
                                   Advance
                                                    70000
                                                                       | Not-Allocated
rows in set (0.00 sec)
nysql>
```

Full join -

```
mysql> select * from studentsubjectinformation full join studentscholarshipinformation where SubjectOpted='M
aths';
 StudentRollNo | SubjectOpted | SubjectTotalMarks | SubjectObtainedMarks | StudentMarksPercentage | Student
RollNo | ScholarshipName | ScholarshipDesc | ScholarshipAmount | ScholarshipCategory |
              Maths
                            100
                                              10
                                                                   10
                                       50000
                                                         | Not-Allocated
      SQL
                      Advance
                                                                                          | 1
              Maths
                           100
                                                                   90
      SQL
                      Advance
                                       50000
                                                         | Not-Allocated
              Maths
                           100
                                                                   85
                                       50000
      SQL
                      I Advance
                                                         | Not-Allocated
                                                                                          | 1
              Maths
                           100
                                                                   80
                      Advance
                                       50000
                                                         | Not-Allocated
      SQL
              Maths
                           100
                                                                                          2
                                              10
                                                                   10
                                       50000
                                                         | Partial-Allocated
      | SQL
                      Advance
              Maths
                           100
                                              90
                                                         | Partial-Allocated
                                       50000
      SQL
                      Advance
              Maths
                           100
                                                                                          | 2
                                                                   l 85
                                       50000
                                                         | Partial-Allocated
      SQL
                      l Advance
              Maths
                            100
                                                80
                                                                   80
      SQL
                        Advance
                                                         | Partial-Allocated
                           100
              Maths
                                              10
```

16.

TRUNCATE - TRUNCATE SQL query removes all rows from a table, without logging the individual row deletions. TRUNCATE is faster than the DELETE query.

DELETE - SQL DELETE query deletes all records from a database table.

DROP - DROP table query removes one or more table definitions and all data, indexes, triggers, constraints, and permission specifications for those tables.

```
mysql> select * from `Details`;
 StudentName | StudentRollNo | StudentMarksPercentage | ScholarshipAmount
 Ayushi | 1
                            40
                                                    50000
 Ayushi
                             50
                                                    50000
                            42
 Simran
                                                    60000
 Kajal
                            80
                                                    60500
 Rahul
                            85
                                                    60500
 Amay
                            90
                                                    40000
 Piyush
                            10
                                                     70000
 Manju
             8
                             15
                                                     70000
 Pradeep
                                                    70000
             10
 Rishi
                           70
                                                    70000
10 rows in set (0.00 sec)
mysql> select max(StudentMarksPercentage),max(ScholarshipAmount) from `Details`;
 max(StudentMarksPercentage) | max(ScholarshipAmount) |
 90
                      70000
 row in set (0.00 sec)
```

Trigger -

In MySQL, a trigger is a stored program invoked automatically in response to an event such as insert, update, or delete that occurs in the associated table. For example, you can define a trigger that is invoked automatically before a new row is inserted into a table.

Procedure -

A procedure (often called a stored procedure) is a collection of pre-compiled SQL statements stored inside the database. It is a subroutine or a subprogram in the regular computing language. A procedure always contains a name, parameter lists, and SQL statements.

View -

A view is a database object that has no values. Its contents are based on the base table. It contains rows and columns similar to the real table.

Function -

A function always returns a value using the return statement. The function can be used in SQL queries.