**Name :**

**Roll No :**

**Title :** Write a PL/SQL block to implement all types of cursor.

mysql> show databases;

+ +

| Database |

+ +

| information\_schema |

| mysql |

| performance\_schema |

| sakila |

| sys |

| world |

+ +

6 rows in set (0.01 sec)

mysql> create database student\_grade; Query OK, 1 row affected (0.01 sec)

mysql> use student\_grade; Database changed

mysql> create table stud(Roll\_no int primary key,Name varchar(15) not null,sub1 int not null,sub2 int not null,sub3 int not null);

Query OK, 0 rows affected (0.05 sec)

mysql> desc stud;

+ + + + +

+ +

| Field | Type | Null | Key | Default | Extra |

+ + + + + + +

| Roll\_no | int | NO | PRI | NULL | |

| Name | varchar(15) | NO | | NULL | |

| sub1 | int | NO | | NULL | |

| sub2 | int | NO | | NULL | |

| sub3 | int | NO | | NULL | |

+ + + + +

5 rows in set (0.00 sec)

+ +

mysql> insert into stud values(1,'John',90,95,97); Query OK, 1 row affected (0.01 sec)

mysql> insert into stud values(2,'Mark',80,85,77); Query OK, 1 row affected (0.01 sec)

mysql> insert into stud values(3,'Jonas',65,64,63); Query OK, 1 row affected (0.01 sec)

mysql> insert into stud values(4,'Jay',50,55,60); Query OK, 1 row affected (0.01 sec)

mysql> insert into stud values(5,'Frank',35,30,40); Query OK, 1 row affected (0.01 sec)

mysql> select \* from stud;

+ + + +

+ +

| Roll\_no | Name | sub1 | sub2 | sub3 |

+ + + + + +

| 1 | John | 90 | 95 | 97 |

| 2 | Mark | 80 | 85 | 77 |

| 3 | Jonas | 65 | 64 | 63 |

| 4 | Jay | 50 | 55 | 60 |

| 5 | Frank | 35 | 30 | 40 |

+ + + +

5 rows in set (0.00 sec)

+ +

mysql> delimiter //

mysql> create procedure cal\_grade()

-> begin

-> declare rn,s1,s2,s3,t int;

-> declare stu\_cursor cursor for select Roll\_no,sub1,sub2,sub3 from stud;

-> open stu\_cursor;

-> cursor\_stu:loop

-> fetch stu\_cursor into rn,s1,s2,s3;

-> set t=(s1+s2+s3)/3;

-> if t>80 then select concat('O: ',t) as "rows";

-> end if;

-> if t>=75 and t<=80 then select concat('A+: ',t) as "rows";

-> end if;

-> if t>=71 and t<=74 then select concat('A: ',t) as "rows";

-> end if;

-> if t>=65 and t<=70 then select concat('B+: ',t) as "rows";

-> end if;

-> if t>=60 and t<=64 then select concat('B: ',t) as "rows";

-> end if;

-> if t>=55 and t<=59 then select concat('C+: ',t) as "rows";

-> end if;

-> if t>=50 and t<=54 then select concat('C: ',t) as "rows";

-> end if;

-> if t>=35 and t<=40 then select concat('FAIL: ',t) as "rows";

-> end if;

-> end loop cursor\_stu;

-> close stu\_cursor;

-> end //

Query OK, 0 rows affected (0.04 sec) mysql> delimiter ;

mysql> call cal\_grade();

+ +

| rows |

+ +

| O: 94 |

+ +

1 row in set (0.00 sec)

+ +

| rows |

+ +

| O: 81 |

+ +

1 row in set (0.00 sec)

+ +

| rows |

+ +

| B: 64 |

+ +

1 row in set (0.00 sec)

+ +

| rows |

+ +

| C+: 55 |

+ +

1 row in set (0.00 sec)

+ +

| rows |

+ +

| FAIL: 35 |

+ +

1 row in set (0.01 sec)

ERROR 1329 (02000): No data - zero rows fetched, selected, or processed