

Practical Assignment 1: Write and execute PL/SQL stored procedure and function to perform a suitable task on the database. Demonstrate its use

```
mysql> create database PVG1;
Query OK, 1 row affected (0.02 sec)
```

```
mysql> use pvg1
Database changed
```

```
mysql> create table student
-> (
-> sno int(10),
-> name varchar(10),
-> sub1 int(3),
-> sub2 int(3),
-> sub3 int(3),
-> total int(3),
-> percentage float(5,2),
-> grade varchar(20)
-> );
Query OK, 0 rows affected, 6 warnings (0.04 sec)
```

```
mysql> desc student;
```

Field	Type	Null	Key	Default	Extra
sno	int	YES		NULL	
name	varchar(10)	YES		NULL	
sub1	int	YES		NULL	
sub2	int	YES		NULL	
sub3	int	YES		NULL	
total	int	YES		NULL	
percentage	float(5,2)	YES		NULL	
grade	varchar(20)	YES		NULL	

8 rows in set (0.00 sec)

```
mysql> insert into student values
-> (1, 'AMIT', 55, 66, 77, NULL, NULL, NULL),
-> (2, 'AJIT', 66, 44, 77, NULL, NULL, NULL),
-> (3, 'VIRAT', 50, 60, 70, NULL, NULL, NULL),
-> (4, 'JIT', 30, 30, 30, NULL, NULL, NULL),
-> (5, 'RAHUL', 52, 62, 57, NULL, NULL, NULL),
-> (6, 'KAPIL', 65, 45, 75, NULL, NULL, NULL),
-> (7, 'ROHIT', 52, 60, 50, NULL, NULL, NULL),
-> (8, 'SUSHIL', 67, 46, 75, NULL, NULL, NULL),
-> (9, 'SACHIN', 50, 50, 50, NULL, NULL, NULL),
-> (10, 'SUNIL', 60, 40, 70, NULL, NULL, NULL);
```

```
Query OK, 10 rows affected (0.01 sec)
Records: 10  Duplicates: 0  Warnings: 0
```

```
mysql> select * from student;
```

sno	name	sub1	sub2	sub3	total	percentage	grade
1	AMIT	55	66	77	NULL	NULL	NULL

2	AJIT	66	44	77	NULL	NULL	NULL
3	VIRAT	50	60	70	NULL	NULL	NULL
4	JIT	30	30	30	NULL	NULL	NULL
5	RAHUL	52	62	57	NULL	NULL	NULL
6	KAPIL	65	45	75	NULL	NULL	NULL
7	ROHIT	52	60	50	NULL	NULL	NULL
8	SUSHIL	67	46	75	NULL	NULL	NULL
9	SACHIN	50	50	50	NULL	NULL	NULL
10	SUNIL	60	40	70	NULL	NULL	NULL

10 rows in set (0.00 sec)

```
mysql> DELIMITER //
```

```
mysql> create procedure calpercentage()
-> begin
-> declare s1,s2,s3,tot int(3);
-> declare per float(5,2);
-> declare grde varchar(20);
-> declare i,cnt,id int(10);
-> SET i=0;
-> select count(*) into cnt from student;
-> while i<cnt do
-> select sno,sub1,sub2,sub3 into id,s1,s2,s3 from student limit i,1;
-> SET tot=(s1+s2+s3);
-> SET per=tot/3;
-> if per>40 then
-> SET grde='PASS';
-> else
-> SET grde='FAIL';
-> end if;
-> SELECT tot,per,grde;
-> update student SET total=tot,percentage=per,grade=grde where
sno=id;
-> SET i=i+1;
-> end while;
-> end //
```

Query OK, 0 rows affected, 3 warnings (0.01 sec)

```
mysql> call calpercentage()//
```

tot	per	grde
198	66.00	PASS

1 row in set (0.01 sec)

tot	per	grde
187	62.33	PASS

1 row in set (0.01 sec)

tot	per	grde
180	60.00	PASS

```
+-----+-----+-----+
1 row in set (0.02 sec)
```

```
+-----+-----+-----+
| tot  | per   | grde |
+-----+-----+-----+
|  90  | 30.00 | FAIL |
+-----+-----+-----+
1 row in set (0.02 sec)
```

```
+-----+-----+-----+
| tot  | per   | grde |
+-----+-----+-----+
| 171  | 57.00 | PASS |
+-----+-----+-----+
1 row in set (0.03 sec)
```

```
+-----+-----+-----+
| tot  | per   | grde |
+-----+-----+-----+
| 185  | 61.67 | PASS |
+-----+-----+-----+
1 row in set (0.03 sec)
```

```
+-----+-----+-----+
| tot  | per   | grde |
+-----+-----+-----+
| 162  | 54.00 | PASS |
+-----+-----+-----+
1 row in set (0.03 sec)
```

```
+-----+-----+-----+
| tot  | per   | grde |
+-----+-----+-----+
| 188  | 62.67 | PASS |
+-----+-----+-----+
1 row in set (0.04 sec)
```

```
+-----+-----+-----+
| tot  | per   | grde |
+-----+-----+-----+
| 150  | 50.00 | PASS |
+-----+-----+-----+
1 row in set (0.04 sec)
```

```
+-----+-----+-----+
| tot  | per   | grde |
+-----+-----+-----+
| 170  | 56.67 | PASS |
+-----+-----+-----+
1 row in set (0.04 sec)
```

Query OK, 1 row affected (0.05 sec)