

Title Named PL/SQL Block: PL/SQL stored procedure & stored functions

Problem Statement:

Write a stored procedure namely proc\_Grade for the categorization of student. If marks scored by students in examination is  $\leq 1500$  & marks  $\geq 990$  then student will be placed in distinction category; if marks scored are between 989 & 900 category is first class. If marks are between 899 & 825 category is Higher Second Class. Write PL/SQL block to use procedure created with above requirements.

Outcome & Objectives:

- 1) Understand Named PL/SQL block i.e. stored procedure & functions.
- 2) Differentiate b/w procedure & function based on various parameters.

Theory Related Concepts:

Procedures:

- 1) A procedure is a subprogram that performs a specific action / task.
- 2) procedure has two parts
  - 1) Procedure Specification.
  - 2) Procedure Body.



⇒ Syntax for creating procedures:

```
CREATE PROCEDURE procedure-name  
  [(argument 1 [IN/OUT/ IN OUT] type),  
   (argument 2 [IN/OUT/ IN OUT] type),  
  ]  
IS/AS  
PROCEDURE BODY
```

⇒ deleting procedure

```
DROP PROCEDURE procedure-name
```

### Functions:

⇒ function is a subprogram which is used to compute values.

⇒ similar to procedure function also takes values, but the difference is that the procedure call is a PL/SQL statement by itself, while a function call is called as a part of an expression.

⇒ syntax:

```
CREATE FUNCTION function-name  
  [(argument 1 [IN/OUT/ IN OUT] type),  
   (argument 2 [IN/OUT/ IN OUT] type),  
  ]
```

```
RETURN return-type IS/AS  
function-body
```

⇒ Deleting function

```
DROP FUNCTION function-name
```



### Test cases & outputs:

Test cases & outputs screenshots are separately provided.

### Conclusion:

In this assignment I have learned about ~~pre~~ PL/SQL stored procedures & functions. I also implemented the same in MySQL.