

Assignment No. 7

- Title : PL/SQL stored procedure and stored function
- Problem Statement : Write a stored procedure namely proc_Grade for the categorization of student.
- Objective : To,
 - 1) Understand the PL/SQL stored Procedure
 - 2) Understand the PL/SQL stored function.
 - 3) Write PL/SQL block code using stored procedure and stored function.
- Outcomes : We will be able to,
 - 1) Implement PL/SQL stored procedure and function.
 - 2) Write PL/SQL block code using stored procedure & stored function.
- S/W & H/W Requirements :

MySQL, PC with the configuration or latest version of 64-bit OS - Fedora/Windows 10, 16GB RAM.
- Theory :

PL/SQL Stored Function :

A Function is a named PL/SQL Block which is similar to a procedure. The major difference between a procedure and a function is, a function must always return a value, but a procedure may or

Or may not return a value.

General Syntax to create a function is

```
CREATE [OR REPLACE] FUNCTION function_name [parameters]
```

```
RETURN return_datatype;
```

```
IS
```

```
Declaration section
```

```
BEGIN
```

```
Execution section
```

```
Return return_variables;
```

```
EXCEPTION
```

```
Exception section
```

```
Return return_variable;
```

```
END;
```

Return Type : The header section defines the return type of the function. The return datatype can be any of the Oracle datatype like varchar, number, etc.

The execution and exception section both should return a value which is of the datatype defined in the header section.

• Test Cases:

Input	Expected O/P	Actual O/P	Result
1) Select * from stud_marks	All 5 entries with rollno, name & total marks displayed	All 5 entries with rollno, name & total marks displayed	PASS
2) select proc_grade(1)	First Class	First Class	PASS
3) select * from result.	Rollno, name and class of respective rollno displayed	Rollno, name and class of respective rollno displayed	PASS

• Conclusion:

Thus, we understand procedures, functions, and implemented the assignment using them. All the test cases yielded the result PASS.