

TUTORIAL

PL/SQL Scenario-Based Question: Procedure and Function

You are designing a student management system for a college. The system must allow storing and calculating academic performance for students.

Task 1: Create a Table

Create a table named `student_scores` with the following structure:

```
CREATE TABLE student_scores (  
  student_id  NUMBER PRIMARY KEY,  
  name        VARCHAR2(50),  
  mark1       NUMBER,  
  mark2       NUMBER,  
  mark3       NUMBER,  
  total       NUMBER,  
  grade       VARCHAR2(2)  
);
```

Task 2: Write a Function named `calculate_total`

This function should:

- Accept 3 marks as input parameters (`mark1`, `mark2`, `mark3`).
- Return the total of the 3 marks.

Task 3: Write a Procedure named `update_student_result`

This procedure should:

- Accept `student_id`, `mark1`, `mark2`, and `mark3` as input.
- Calculate the total using the `calculate_total` function.
- Assign a grade based on the total:
 - 'A' if total ≥ 240
 - 'B' if total ≥ 180 and < 240
 - 'C' if total < 180
- Update the corresponding student's total and grade in the `student_scores` table.

Task 4: Test the Procedure

Insert a sample student and call the procedure to update their marks, total, and grade.