Database Management Systems

Lab Cycle-V (PL/SQL- Packages LOBs and Transaction Processing)

PACKAGES:

1. Create a package specification and the body for a package named *School_api()*. The package contains the procedure *Get_name_addressi()* and the function *Instructor_status()*.
   Get_name_addressi(): The procedure should accept two parameters to hold a table name and an ID and should return six parameters with first name, last name, street, city, state, and zip code information
   Instroctor_status(): For a given instructor, determine how many sections he or she is teaching. If the number is greater than or equal to 3, return a message saying that the instructor needs a vacation. Otherwise, return a message saying how many sections this instructor is teaching.

2. Add a procedure to the *school_api* package called *remove_student*. This procedure accepts a *student_id* and returns nothing. Based on the student ID passed in, it removes the student from the database. If the student does not exist or if a problem occurs while removing the student (such as a foreign key constraint violation), let the calling program handle it.

3. Alter *remove_student* in the *school_api* package body to accept an additional parameter. This new parameter should be a VARCHAR2 and should be called p_ri. Make p_ri default to R. The new parameter may contain a value of R or C. If R is received, it represents DELETE RESTRICT, and the procedure acts as it does now. If there are enrollments for the student, the delete is disallowed. If a C is received, it represents DELETE CASCADE. This functionally means that the *remove_student* procedure locates all records for the student in all the Student Database tables. It removes them from the database before attempting to remove the student from the student table. Decide how to handle the situation when the user passes in a code other than C or R.

LORGE OBJECTS (LOBs)

4. Go through the lab manual *LOB_lab_Manual.pdf* and practice the examples give in the manual.

TRANSACTION PROCESSING

5. Go through the lab manual *PLSQL_Transactions_Manual.pdf (Only the highlighted chapter- Processing Transactions: pages from 5-40 to 5-50)* then practice examples given in the manual.