**Deploying WMS PL/SQL code using AI**

**Description:**

Use a Large Language Model to intelligently analyse an existing PL/SQL package and insert an appropriate UPDATE statement in the correct section, based on user input such as table name, column names, and conditions.

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| S.No. | Module | Status |
| 1 | [PL/SQL creation and code validation](http://1.pl/SQL) | Success |
| 2 | Code deployment into GitHub and Oracle Database | Failed |
| 3 | Code validation in oracle database and testing the updated code using synthetic data | Inprogress |

Planning to have separate modules as below

**Actors:**

* User (Developer or DBA)
* LLM Agent (e.g., ChatGPT-based assistant)
* Codebase (PL/SQL package source files)

**The user provides clear inputs:**

* Table name
* Column(s) to update
* Update condition (WHERE clause)
* Package name and procedure/function (optional)

**Steps being followed:**

**1. Input Phase**

User gives a prompt like: *"Add an UPDATE statement to set status = 'COMPLETE' in the procedure update\_order\_status for orders where order\_id = :order\_id."*

**2. Backup the existing package**

LLM identifies the package that need to be updated and takes the backup of the target package in the local/GIT repository.

**3.Code Parsing**

LLM reads and understands the structure of the existing PL/SQL package and it Identifies the correct procedure/function block (update\_order\_status).

**4. Code Generation**

LLM generates a syntactically correct UPDATE statement and places it in the appropriate part of the procedure.

*UPDATE orders SET status = 'COMPLETE' WHERE order\_id = :order\_id;*

**4. Ask permission to proceed on deployment**

LLM ask for the user confirmation to proceed on the PL/SQL deployment. The dialogue box appears to confirm (Yes/No)

**5. Output**

Updated procedure is shown in the output to the user in comparison with the existing code.

**Postconditions:**

The PL/SQL package contains the new UPDATE statement in the correct location.

No syntax errors introduced.

Code is ready for validation/testing.

**Optional features:**

Add test case for the updated procedure.

Allow rollback or undo changes.

Validate SQL syntax before applying.

Push code to version control after update.