1. **Create a stored procedure called traffic\_signal\_status to log the behavior of a vehicle based on the color of a traffic signal. The procedure should accept three parameters:**

* The vehicle's ID (vehicle\_id).
* The time of observation (observation\_time).
* The traffic signal color (signal\_color).

Based on the signal\_color, assign an appropriate action\_description as follows:

* 'Red' → "Stop"
* 'Yellow' → "Slow Down"
* 'Green' → "Go"
* Any other value → "Invalid Signal"

1. **Write a PL/SQL block to simulate a user trying to log into a system. The user has a total of 4 login attempts.**

For each attempt, **decrease the attempt counter by 1**.

If the remaining attempt is 2, skip the current iteration using CONTINUE (simulate a timeout or skipped attempt).

Print the current attempt number.

Exit the loop when the number of remaining attempts becomes less than 1.

After the loop, display: "Login process ended."

1. Write a PL/SQL block that evaluates the performance of 4 students based on their scores. Use a FOR loop from 1..4, and assume each student's score is fixed as follows:

| **Student ID** | **Score** |
| --- | --- |
| 1 | 45 |
| 2 | 60 |
| 3 | 75 |
| 4 | 85 |

If the score is less than 50, print "Student [ID] has failed".

If the score is equal to 60, print "Student [ID] just passed".

If the score is greater than 60, print "Student [ID] performed well".

1. Explain cursor give some examples.
2. Write a PL/SQL block using an **explicit cursor** to retrieve and display the last name and job title of employees from the employees table.

**Requirements:**

Use a cursor named emp\_cursor to select last\_name and job\_title from the employees table.

The WHERE clause should filter the job titles using a pattern that matches titles starting with **‘A’** (i.e., using LIKE 'A%').

The results should be ordered by last\_name.

Loop through the cursor and display the result in the following format using DBMS\_OUTPUT.PUT\_LINE: