**22.**

**1) Defining a User-Defined Exception: You can define a user-defined exception using the EXCEPTION keyword. You declare the exception in the DECLARE section of your PL/SQL block.**

**plsql**

**Copy code**

**DECLARE**

**exception\_name EXCEPTION;**

**BEGIN**

**-- code that triggers the exception**

**EXCEPTION**

**WHEN exception\_name THEN**

**-- Exception handling code**

**END;**

**2)** **DECLARE**

**-- Declare the user-defined exception**

**INVALID\_ID EXCEPTION;**

**-- Declare a variable to hold the customer ID entered by the user**

**customer\_id NUMBER;**

**-- Declare a variable to store the count of the customer ID found in the table**

**customer\_count NUMBER;**

**BEGIN**

**-- Accept input from the user**

**customer\_id := &customer\_id; -- Use a substitution variable for user input**

**-- Query to check if the customer ID exists in the customer table**

**SELECT COUNT(\*)**

**INTO customer\_count**

**FROM customer**

**WHERE id = customer\_id;**

**-- If customer\_count is 0, it means the ID doesn't exist**

**IF customer\_count = 0 THEN**

**-- Raise the user-defined exception**

**RAISE INVALID\_ID;**

**ELSE**

**-- If the ID is valid, display the customer details (just an example)**

**DBMS\_OUTPUT.PUT\_LINE('Customer ID ' || customer\_id || ' is valid.');**

**END IF;**

**EXCEPTION**

**-- Handle the user-defined exception**

**WHEN INVALID\_ID THEN**

**DBMS\_OUTPUT.PUT\_LINE('Error: Invalid Customer ID entered.');**

**WHEN OTHERS THEN**

**DBMS\_OUTPUT.PUT\_LINE('An unexpected error occurred: ' || SQLERRM);**

**END;**