*PL /SQL Queries*

1. Function to Get Surgery Name

CREATE OR REPLACE FUNCTION get\_surgery\_name(surgery\_id IN INT) RETURN VARCHAR AS

surgery\_name VARCHAR(50);

BEGIN

SELECT surgery\_name INTO surgery\_name FROM Surgeries WHERE surgery\_id = surgery\_id;

RETURN surgery\_name;

END;

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2. Get names and department of all doctors in the hospital

CREATE OR REPLACE FUNCTION get\_doctor\_department(doctor\_id IN INT) RETURN VARCHAR AS

department VARCHAR(50);

BEGIN

SELECT department INTO department FROM Doctor WHERE doctor\_id = doctor\_id;

RETURN department;

END;

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3.Function to Calculate Length of Stay for a Patient

CREATE OR REPLACE FUNCTION calculate\_length\_of\_stay(admittance\_id IN INT) RETURN NUMBER AS

length\_of\_stay NUMBER;

BEGIN

SELECT TRUNC(discharge\_date - admission\_date) INTO length\_of\_stay FROM Admittance WHERE admittance\_id = admittance\_id;

RETURN length\_of\_stay;

END;

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4Trigger to add details in a log table

CREATE OR REPLACE TRIGGER log\_room\_changes

BEFORE UPDATE OF room\_id ON Admittance

FOR EACH ROW

BEGIN

INSERT INTO Room\_Log (admittance\_id, old\_room\_id, new\_room\_id, change\_date)

VALUES (:OLD.admittance\_id, :OLD.room\_id, :NEW.room\_id, SYSDATE);

END;

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5.PL/SQL Trigger to Prevent Duplicate Surgeries

CREATE OR REPLACE TRIGGER prevent\_duplicate\_surgeries

BEFORE INSERT ON Operation

FOR EACH ROW

DECLARE

surgery\_count NUMBER;

BEGIN

SELECT COUNT(\*) INTO surgery\_count

FROM Operation

WHERE patient\_id = :NEW.patient\_id

AND surgery\_id = :NEW.surgery\_id;

IF surgery\_count > 0 THEN

RAISE\_APPLICATION\_ERROR(-20001, 'Patient cannot undergo the same surgery twice.');

END IF;

END;

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