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**Q1) Basic Anonymous Block with DBMS\_OUTPUT.PUT\_LINE.**

sql

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BEGIN

DBMS\_OUTPUT.PUT\_LINE('Hello World');

END;

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**1) Add Declarative Section with TODAY and TOMORROW Variables**

sql

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DECLARE

TODAY DATE := SYSDATE;

TOMORROW TODAY%TYPE;

BEGIN

TOMORROW := TODAY + 1;

DBMS\_OUTPUT.PUT\_LINE('Hello World');

DBMS\_OUTPUT.PUT\_LINE('Today is: ' || TO\_CHAR(TODAY, 'DD-MON-YYYY'));

DBMS\_OUTPUT.PUT\_LINE('Tomorrow is: ' || TO\_CHAR(TOMORROW, 'DD-MON-YYYY'));

END;

**2) (Continued in same block above)**

Already includes printing of TODAY and TOMORROW after "Hello World".

**3) Output Today’s Date in ‘Month dd, yyyy’ Format and Display Last Day of Month**

sql

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DECLARE

my\_date DATE := SYSDATE;

v\_last\_day DATE;

BEGIN

v\_last\_day := LAST\_DAY(my\_date);

DBMS\_OUTPUT.PUT\_LINE('Today is: ' || TO\_CHAR(my\_date, 'Month DD, YYYY'));

DBMS\_OUTPUT.PUT\_LINE('Last day of this month is: ' || TO\_CHAR(v\_last\_day, 'Month DD, YYYY'));

END;

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**4) Add 45 Days and Display Months Between Dates**

sql

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DECLARE

my\_date DATE := SYSDATE;

future\_date DATE;

months\_diff NUMBER;

BEGIN

future\_date := my\_date + 45;

months\_diff := MONTHS\_BETWEEN(future\_date, my\_date);

DBMS\_OUTPUT.PUT\_LINE('Today is: ' || TO\_CHAR(my\_date, 'Month DD, YYYY'));

DBMS\_OUTPUT.PUT\_LINE('Date after 45 days: ' || TO\_CHAR(future\_date, 'Month DD, YYYY'));

DBMS\_OUTPUT.PUT\_LINE('Months between the dates: ' || TO\_CHAR(months\_diff, '999.99'));

END;

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**Q2) Create table called countries with two columns named country\_name, median\_age.**

**Step 1: Create the countries table**

sql

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CREATE TABLE countries (

country\_name VARCHAR2(50),

median\_age NUMBER(6, 2)

);

**Step 2: Insert several records**

sql

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INSERT INTO countries (country\_name, median\_age) VALUES ('Japan', 48.4);

INSERT INTO countries (country\_name, median\_age) VALUES ('India', 28.4);

INSERT INTO countries (country\_name, median\_age) VALUES ('Germany', 47.8);

INSERT INTO countries (country\_name, median\_age) VALUES ('USA', 38.5);

INSERT INTO countries (country\_name, median\_age) VALUES ('Brazil', 33.5);

**Step 3: Modify PL/SQL to use %TYPE attributes**

sql

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DECLARE

v\_country\_name countries.country\_name%TYPE;

v\_median\_age countries.median\_age%TYPE;

BEGIN

SELECT country\_name, median\_age INTO v\_country\_name, v\_median\_age

FROM countries

WHERE country\_name = 'Japan';

DBMS\_OUTPUT.PUT\_LINE('The median age in ' || v\_country\_name || ' is ' || v\_median\_age || '.');

END;

**Step 4: Rewrite using an explicit cursor**

sql

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DECLARE

CURSOR country\_cursor IS

SELECT country\_name, median\_age

FROM countries

WHERE country\_name = 'Japan';

v\_country\_name countries.country\_name%TYPE;

v\_median\_age countries.median\_age%TYPE;

BEGIN

OPEN country\_cursor;

FETCH country\_cursor INTO v\_country\_name, v\_median\_age;

IF country\_cursor%FOUND THEN

DBMS\_OUTPUT.PUT\_LINE('The median age in ' || v\_country\_name || ' is ' || v\_median\_age || '.');

END IF;

CLOSE country\_cursor;

END;