

Write and execute PL/SQL function to print /return binary equivalent of decimal number.

Aishi De

```
SQL> SET SERVEROUTPUT ON;
SQL>
SQL> CREATE OR REPLACE FUNCTION DecimalToBinary (decimal_num IN NUMBER) RETURN VARCHAR2 IS
2     binary_result VARCHAR2(100);
3     quotient NUMBER := decimal_num;
4     remainder NUMBER;
5 BEGIN
6     binary_result := '';
7
8     -- Repeatedly divide the number by 2 and store remainders
9     WHILE quotient > 0 LOOP
10        remainder := MOD(quotient, 2); -- Get remainder (either 0 or 1)
11        binary_result := TO_CHAR(remainder) || binary_result; -- Concatenate remainder to binary
result
12        quotient := FLOOR(quotient / 2); -- Divide quotient by 2 for next iteration
13    END LOOP;
14
15    IF binary_result IS NULL THEN
16        binary_result := '0'; -- Handle the case for 0
17    END IF;
18
19    RETURN binary_result;
20 END;
21 /
```

Function created.

```
SQL>
SQL> -- To test the function, use the following query
SQL> DECLARE
2     decimal_number NUMBER := 10; -- Change the decimal number as needed
3     binary_value VARCHAR2(100);
4 BEGIN
5     binary_value := DecimalToBinary(decimal_number);
6     DBMS_OUTPUT.PUT_LINE('The binary equivalent of ' || decimal_number || ' is: ' || binary_valu
e);
7 END;
8 /
```

The binary equivalent of 10 is: 1010

PL/SQL procedure successfully completed.

SQL> aishi