

## What is a NULL value ?

What is a NULL value ?

If a row does not have an entry for a particular column, that value is said to be NULL..

What is a NULL value ?

It is the absence of any character, zero, blank space etc.

What is a NULL value ?

Arithmetic operations on a NULL value always return a NULL value.

## Defining a Null Value

- Null is a value that is unavailable, unassigned, unknown, or inapplicable.
- Null is not the same as zero or a blank space.

```
SELECT order_id, ROUND(order_date) "ORDER_DATE",  
       customer_id, promotion_id  
FROM orders;
```

	ORDER_ID	ORDER_DATE	CUSTOMER_ID	PROMOTION_ID
1	2458	17-AUG-99	101	(null)
2	2397	20-NOV-99	102	(null)
3	2454	03-OCT-99	103	(null)
4	2354	19-JUL-00	104	(null)
5	2358	09-JAN-00	105	(null)

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**Note:** Round() will be explained later during the course of the presentation.

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## Defining a Null Value

If a row lacks a data value for a particular column, that value is said to be *null* or to contain a null.

Null is a value that is unavailable, unassigned, unknown, or inapplicable. Null is not the same as zero or a blank space. Zero is a number and blank space is a character.

Columns of any data type can contain nulls. However, some constraints (NOT NULL and PRIMARY KEY) prevent nulls from being used in the column.

In the PROMOTION\_ID column in the ORDERS table, notice that none of the orders have a promotion ID. A null represents that fact.

**Note:** By default, SQL Developer uses the literal, (null), to identify null values. However, you can set it to something more relevant to you. To do so, select Preferences from the Tools menu. In the Preferences dialog box, expand the Database node. Click Advanced Parameters and on the right pane, for the "Display Null value As," enter the appropriate value.

## Null Values in Arithmetic Expressions

- Arithmetic expressions containing a null value evaluate to null.

```
SELECT order_id, 12*order_id*promotion_id  
FROM orders;
```

	ORDER_ID	12*ORDER_ID*PROMOTION_ID
1	2458	(null)
2	2297	(null)
3	2454	(null)
4	2354	(null)
5	2358	(null)
6	2381	(null)
7	2440	(null)
8	2357	(null)
9	2394	(null)
10	2435	(null)
11	2455	(null)

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## Null Values in Arithmetic Expressions

If any column value in an arithmetic expression is null, the result is null. For example, if you attempt to perform division by zero, you get an error. However, if you divide a number by null, the result is a null or unknown.

In the example in the slide, `12*order_id*promotion_id` evaluates to NULL as the `promotion_id` is NULL of all the orders.

For more information, see the section on “Basic Elements of Oracle SQL” in *Oracle Database SQL Language Reference* for 10g or 11g database.

## Defining a Column Alias

