Oracle Cheatsheet

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# Dates and Times

## Difference between 2 Timestamps in seconds

SELECT (extract(DAY FROM time2-time1)\*24\*60\*60)+

(extract(HOUR FROM time2-time1)\*60\*60)+

(extract(MINUTE FROM time2-time1)\*60)+

extract(SECOND FROM time2-time1)

# Functions

## Creating a Function

CREATE OR REPLACE FUNCTION TEST\_HELLO

(

PARAM1 IN VARCHAR2

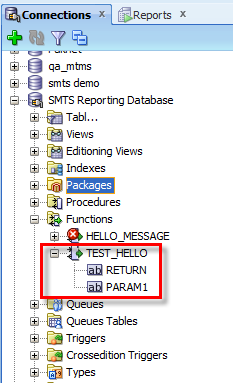
) RETURN VARCHAR2 AS

BEGIN

RETURN 'Hello' || PARAM1;

END TEST\_HELLO;

This creates a function which will exist in the database’s Functions node:



The function can be invoked as follows:

select TEST\_HELLO(msg)

from sgs\_africarpt.feed\_raw;

# Geodesy

## Create an SDO Geometry Point

select SDO\_GEOMETRY(2001, 8307, SDO\_POINT\_TYPE(36.86, -1.29431, NULL), NULL, NULL) from dual;

Here, ‘8307’ indicates geodetic (earth surface).

## Distance between two points

SELECT SDO\_GEOM.SDO\_DISTANCE(SDO\_GEOMETRY(2001, 8307, SDO\_POINT\_TYPE(36, -1, NULL), NULL, NULL),

SDO\_GEOMETRY(2001, 8307, SDO\_POINT\_TYPE(37, 0, NULL), NULL, NULL), 0.005, 'unit=KM')

FROM dual;



Obviously, units are in KM.

2001 indicates a point

8307 indicates WGS84

The arguments are longitude first, latitude second

## Extract latitude and longitude from an SDO.Geometry point

select JLL.LOC.sdo\_point.x as longitude, jll.LOC.sdo\_point.y as latitude

from sgs\_africarpt.journey\_loc\_log JLL;

## Extract latitude and longitude from an SDO.Geometry polygon

select SDO\_GEOM.SDO\_CENTROID(polygon, 0.05).SDO\_POINT.x as longitude,

SDO\_GEOM.SDO\_CENTROID(polygon, 0.05).SDO\_POINT.y as latitude

from sgs\_africarpt.fence

where NAME = 'NAIROBI';

# Math

## Half-round even

select round(to\_binary\_float(1.035 \* 100)) / 100

from dual;

# Regular Expressions

## Replace unwanted characters

select regexp\_replace('+1.2-3 a', '[^(0-9).-/+]+', '') from dual;

+1.23

Replaces all non-numeric characters with an empty string

## Constrain a character field to numeric values

where regexp\_like(feed\_master.lat\_dms, '^[0123456789]{7}[NS]{1}$')

# Specify a schema

alter session set current\_schema=SGS\_AFRICARPT