**Oracle/PLSQL: Primary Keys**

This Oracle tutorial explains how to **create, drop, disable, and enable a primary key** in Oracle with syntax and examples.

**What is a primary key in Oracle?**

In Oracle, a **primary key** is a single field or combination of fields that uniquely defines a record. None of the fields that are part of the primary key can contain a null value. A table can have only one primary key.

**Note**

* In Oracle, a primary key can not contain more than 32 columns.
* A primary key can be defined in either a CREATE TABLE statement or an ALTER TABLE statement.

**Create Primary Key - Using CREATE TABLE statement**

You can create a primary key in Oracle with the CREATE TABLE statement.

Syntax

The syntax to create a primary key using the CREATE TABLE statement in Oracle/PLSQL is:

CREATE TABLE table\_name

(

column1 datatype null/not null,

column2 datatype null/not null,

...

CONSTRAINT constraint\_name PRIMARY KEY (column1, column2, ... column\_n)

);

Example

Let's look at an example of how to create a primary key using the CREATE TABLE statement in Oracle:

CREATE TABLE supplier

(

supplier\_id numeric(10) not null,

supplier\_name varchar2(50) not null,

contact\_name varchar2(50),

CONSTRAINT supplier\_pk PRIMARY KEY (supplier\_id)

);

In this example, we've created a primary key on the supplier table called supplier\_pk. It consists of only one field - the supplier\_id field.

We could also create a primary key with more than one field as in the example below:

CREATE TABLE supplier

(

supplier\_id numeric(10) not null,

supplier\_name varchar2(50) not null,

contact\_name varchar2(50),

CONSTRAINT supplier\_pk PRIMARY KEY (supplier\_id, supplier\_name)

);

**Create Primary Key - Using ALTER TABLE statement**

You can create a primary key in Oracle with the ALTER TABLE statement.

Syntax

The syntax to create a primary key using the ALTER TABLE statement in Oracle/PLSQL is:

ALTER TABLE table\_name

ADD CONSTRAINT constraint\_name PRIMARY KEY (column1, column2, ... column\_n);

Example

Let's look at an example of how to create a primary key using the ALTER TABLE statement in Oracle.

ALTER TABLE supplier

ADD CONSTRAINT supplier\_pk PRIMARY KEY (supplier\_id);

In this example, we've created a primary key on the existing supplier table called supplier\_pk. It consists of the field called supplier\_id.

We could also create a primary key with more than one field as in the example below:

ALTER TABLE supplier

ADD CONSTRAINT supplier\_pk PRIMARY KEY (supplier\_id, supplier\_name);

**Drop Primary Key**

You can drop a primary key in Oracle using the ALTER TABLE statement.

Syntax

The syntax to drop a primary key using the ALTER TABLE statement in Oracle/PLSQL is:

ALTER TABLE table\_name

DROP CONSTRAINT constraint\_name;

Example

Let's look at an example of how to drop a primary key using the ALTER TABLE statement in Oracle.

ALTER TABLE supplier

DROP CONSTRAINT supplier\_pk;

In this example, we're dropping a primary key on the supplier table called supplier\_pk.

**Disable Primary Key**

You can disable a primary key in Oracle using the ALTER TABLE statement.

Syntax

The syntax to disable a primary key using the ALTER TABLE statement in Oracle/PLSQL is:

ALTER TABLE table\_name

DISABLE CONSTRAINT constraint\_name;

Example

Let's look at an example of how to disable a primary using the ALTER TABLE statement in Oracle.

ALTER TABLE supplier

DISABLE CONSTRAINT supplier\_pk;

In this example, we're disabling a primary key on the supplier table called supplier\_pk.

**Enable Primary Key**

You can enable a primary key in Oracle using the ALTER TABLE statement.

Syntax

The syntax to enable a primary key using the ALTER TABLE statement in Oracle/PLSQL is:

ALTER TABLE table\_name

ENABLE CONSTRAINT constraint\_name;

Example

Let's look at an example of how to enable a primary key using the ALTER TABLE statement in Oracle.

ALTER TABLE supplier

ENABLE CONSTRAINT supplier\_pk;

In this example, we're enabling a primary key on the supplier table called supplier\_pk.